File No. 120354

Committee Item No. 2
Board Item No. _____

# COMMITTEE/BOARD OF SUPERVISORS

AGENDA PACKET CONTENTS LIST

**Committee:** Budget and Finance Sub-Committee **Date:** April 25, 2012

**Board of Supervisors Meeting** **Date** _____

| Cmte | Board | |
|---|---|---|
| ☐ | ☐ | **Motion** |
| ☐ | ☐ | **Resolution** |
| ☒ | ☐ | **Ordinance** |
| ☒ | ☐ | **Legislative Digest** |
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**OTHER** **(Use back side if additional space is needed)**

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**Completed by:** Victor Young **Date:** April 20, 2012
**Completed by:** Victor Young **Date:** _____

An asterisked item represents the cover sheet to a document that exceeds 25 pages. The complete document is in the file.

[Wastewater Enterprise Commercial Paper Program - Not to Exceed $300,000,000]

**Ordinance authorizing an increase of the Wastewater Enterprise's Commercial Paper program to an amount not to exceed $300,000,000 to be issued from time to time by the San Francisco Public Utilities Commission (the Commission) to finance various capital projects benefitting the Wastewater Enterprise each pursuant to amendments to the Charter (the Charter) of the City and County of San Francisco (the City) enacted by the voters on November 5, 2002, as Proposition E (Proposition E); and ratifying previous actions taken in connection therewith.**

NOTE: Additions are *single-underline italics Times New Roman*; deletions are ~~*strike-through italics Times New Roman*~~. Board amendment additions are double-underlined; Board amendment deletions are ~~strikethrough normal~~.

Be it ordained by the People of the City and County of San Francisco:

Section 1. Findings. The Board of Supervisors (the "Board") of the City hereby finds and declares as follows:

A. On November 5, 2002, the voters of the City and County of San Francisco (the "City") approved Proposition E, codified as Article VIIIB of the Charter of the City (the "Charter"), which among other things, authorized the Commission to issue revenue bonds, including notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities, or combinations of water and clean water facilities under the jurisdiction of the Commission.

B. Pursuant to Section 43.5 of the San Francisco Administrative Code, enacted by Ordinance No. 203-98 adopted by the Board on June 8, 1998, and signed by the Mayor of the City on June 19, 1998, the Board established a procedure pursuant to which the Commission may issue short-term indebtedness, including the issuance of commercial paper in anticipation of the issuance of its revenue bonds.

C. Under Section 8B.124 of the Charter of the City (the "Charter"), the Board's authority to authorize an issuance of debt under Proposition E is subject to its receipt of a certification from an independent engineer that (i) the projects to be financed by such debt meet utility standards and (ii) estimated net revenue will be sufficient to meet operating, maintenance, debt service coverage and other indenture or resolution requirements (the "Engineer Certification").

D. The Board's authority to authorize an issuance of debt under Proposition E is also subject to its receipt of a certification from the San Francisco Planning Department that facilities financed with such debt will comply with applicable requirements of the California Environmental Quality Act (together with the Engineer Certification, the "Proposition E Certificates").

E. The Commission (Resolution No. 06-0164) and the Board (Ordinance No. 266-06) have previously authorized the issuance of commercial paper notes for the Wastewater Enterprise in an aggregate principal amount not to exceed $150,000,000 against Proposition E authorization.

F. On July 27, 2010, Commission Resolution 10-0114 established Levels of Service Goals for the Sewer System Improvement Program Goals, which anticipates the issuance of more than $4 billion dollars of revenue bonds over the upcoming decade.

G. On December 13, 2011 the Commission approved Resolution 11-0197 to increase the commercial paper authorization to $300,000,000 from $150,000,000 to provide

additional short-term financing of capital improvements and related costs for improvements, betterments and additions to the Wastewater Enterprise.

H. The Proposition E Certificates for the prior $150,000,000 authorization are on file with the Clerk of the Board in File No. 061298 and are part of Ordinance No. 266-06. The Proposition E Certificates describing additional improvements to the facilities of the Wastewater Enterprise are on file with the Clerk of the Board, in accordance with Proposition E, in File No. 120354 and support the issuance of additional wastewater commercial paper, revenue bonds and other forms of indebtedness authorized by this Ordinance.

I. The Commission has determined that it is necessary and desirable to make certain additional improvements to the facilities of the Wastewater Enterprise (the "Improvements"), and has further determined to finance the Improvements through the issuance of wastewater revenue bonds, and in anticipation of the issuance of such wastewater revenue bonds, through the expansion of the use of the Commission's commercial paper program and the issuance and reissuance of its commercial paper notes from time to time.

J. On April 27, 2010, the Board adopted Ordinance No. 95-10 appropriating $348,064,054 for the Wastewater Enterprise's Capital Improvement Program and Sewer System Improvement Program for Fiscal Years 2010-2011 and 2011-2012, of which $297,756,235 is to be funded by revenue bond proceeds or other forms of indebtedness, and placing $329,962,235 on Controller's reserve pending the issuance of such revenue bonds or other forms of indebtedness and/or the receipt of other fees and revenues.

K. On April 27, 2010, the Board adopted Ordinance No. 93-10 approving the issuance and sale of wastewater revenue bonds in an aggregate principal amount not to

exceed $297,756,235 which represents $241,182,550 in supplemental capital improvement program appropriations and $56,573,685 in financing costs.

L. The Board now desires to authorize an increase in the aggregate principal amount outstanding for the Commission's Wastewater Enterprise Commercial Paper Program pursuant to said Section 8B.124.

Section 2. Proposition E Certificates. The Board hereby declares that the Proposition E Certificates on file with the Clerk of the Board in File No. 120354 satisfy the requirements of Section 8B.124 of the Charter, and in accordance therewith, the Commission is hereby authorized to issue additional debt pursuant to this authorization.

Section 3. Approval of Increase in Commercial Paper Notes Authorization. The Board hereby approves an increase of the Commission's Commercial Paper program commercial paper authorization to $300,000,000 from $150,000,000 pursuant to Section 8B. 124 of the Charter and approves the issuance and sale of Commercial Paper in one or more series from time to time by the Commission pursuant to the Charter and in accordance with a resolution of the Commission; provided however that any Commercial Paper issued by the Commission shall not exceed twelve percent (12%) per annum. The Commission is hereby authorized to determine the timing, amount and manner of sale of each series of Commercial Paper issued pursuant to this authorization; provided however Commission's authorization to issue Commercial Paper is subject to the approval, by a resolution of the Commission, of the form of offering document prepared in connection with issuance of the Commercial Paper.

Section 4. General Authority. The Controller, the Director of the Office of Public Finance, the Treasurer, the General Manager of the Commission, the City Attorney and other officers of the City and their duly authorized deputies and agents are hereby authorized and directed, jointly and severally, to take such actions and to execute and

deliver such certificates, agreements, requests or other documents, as they may deem necessary or desirable to facilitate the issuance, sale and delivery of the Wastewater Commercial Paper Notes, and otherwise to carry out the provisions of this Ordinance.

Section 5. Ratification of Prior Actions. All actions authorized and directed by this Ordinance and heretofore taken are hereby ratified, approved and confirmed by this Board.

Section 6. File Documents. All documents referred to as on file with the Clerk of the Board are in File Nos. 120354.

Section 7. Effective Date. Pursuant to Section 14.102 of the Charter, this Ordinance shall take effect thirty (30) days after its adoption.

APPROVED AS TO FORM:

DENNIS J. HERRERA, City Attorney

By: _____
Mark D. Blake
Deputy City

# LEGISLATIVE DIGEST

[Ordinance to Authorize Increase in Amount of Public Utilities Commission Wastewater Enterprise Commercial Paper Program]

Ordinance authorizing an increase of the Wastewater Enterprise's Commercial Paper program to an amount not to exceed $300,000,000 to be issued from time to time by the San Francisco Public Utilities Commission ("Commission") to finance various capital projects benefitting the Wastewater Enterprise each pursuant to amendments to the Charter (the "Charter") of the City and County of San Francisco (the "City") enacted by the voters on November 5, 2002 as Proposition E ("Proposition E"); and ratifying previous actions taken in connection therewith.

## Existing Law

Pursuant to Section 43.5 of the San Francisco Administrative Code, enacted by Ordinance No. 203-98 adopted by the Board on June 8, 1998, and signed by the Mayor of the City on June 19, 1998, the Board of Supervisors established a procedure pursuant to which the Commission may issue short-term indebtedness, including the issuance of commercial paper in anticipation of the issuance of its revenue bonds.

Under Section 8B.124 of the Charter of the City (the "Charter"), the Board's authority to authorize an issuance of debt under Proposition E is subject to its receipt of a certification from an independent engineer that (i) the projects to be financed by such debt meet utility standards and (ii) estimated net revenue will be sufficient to meet operating, maintenance, debt service coverage and other indenture or resolution requirements (the "Engineer Certification").

The Commission (Resolution No. 06-0164) and the Board (Ordinance No. 266-06) have previously authorized the issuance of commercial paper notes for the Wastewater Enterprise in an aggregate principal amount not to exceed $150,000,000.

On December 13, 2011 the Commission approved Resolution 11-0197 to increase the commercial paper authorization to $300,000,000 from $150,000,000, to provide additional short-term financing of capital improvements and related costs for improvements, betterments and additions to the Wastewater Enterprise, including such improvements identified in the Commission's July 27, 2010 Resolution 10-0114 which established Levels of Service Goals for the Sewer System Improvement Program Goals and which anticipates the issuance of more than $4 billion dollars of revenue bonds over the upcoming decade.

The Commission issues commercial paper notes from time to time to provide interim financing for capital improvements for the wastewater enterprise. Commercial paper notes are a low cost form for financing that the Commission has utilized to provide initial funds to finance its capital projects, and lower the overall costs of borrowing.

## Background Information

The proposed Ordinance approves an increase of the Commission's Commercial Paper program authorization to $300,000,000 from $150,000,000 pursuant to Section 8B. 124 of the Charter and approves the issuance and sale of Commercial Paper in one or more series from time to time by the Commission pursuant to the Charter and in accordance with a resolution of the Commission; provided however that any Commercial Paper issued by the Commission shall not exceed twelve percent (12%) per annum. Commercial paper notes are an interim source of financing pending the issuance of long term revenue bonds. Commercial paper notes provide a low cost means of financing the Commission's capital projects.

| Item 2<br>File 12-0354 | **Department:** Public Utilities Commission (PUC) |
|---|---|

## EXECUTIVE SUMMARY

### Legislative Objective

The proposed ordinance would authorize an increase of $150,000,000 in the San Francisco Public Utilities Commission (PUC) Wastewater Enterprise's Commercial Paper program, from an amount not to exceed $150,000,000 to an amount not to exceed $300,000,000, to be issued from time to time by the PUC to finance various Wastewater Enterprise capital projects pursuant to Proposition E (City Charter Section 8B.124).

### Key Points

- The PUC's Sewer System Improvement Program (SSIP) was initiated to overhaul the City's municipal sewer and stormwater treatment and collection systems. The SSIP is projected to have a 15-year cost of $6.0 billion, from 2011 to 2026.
- Under Charter Section 8B.124, the PUC may issue Commercial Paper to provide short-term financing for Wastewater Enterprise capital projects and associated costs. The PUC currently has authorization from the Board of Supervisors to issue up to $150,000,000 in Wastewater Commercial Paper, for use on SSIP projects.
- As of April 19, 2012, the PUC had expended, allocated, or encumbered $146,871,000 against its $150,000,000 Wastewater Commercial Paper issuance authorization, requiring the PUC at this time to either (1) issue long-term debt rather than short-term commercial paper to fund SSIP projects or (2) request the subject proposed increase to the Wastewater Commercial Paper not-to-exceed limit.
- Under San Francisco Charter Section 8B.124, approval of the proposed ordinance requires two-thirds of the Board of Supervisors.

### Fiscal Impact

- Any Commercial Paper issued would be refunded by proceeds from Wastewater Revenue Bonds, which are projected to be issued in February 2013 in an amount of up to $297,756,235, as previously authorized by the Board of Supervisors. The Water Revenue Bonds will be repaid from sewer service fees charged to San Francisco residents and businesses.
- According to the PUC Deputy Chief Financial Officer, Mr. Charles Perl, approval of the proposed ordinance would authorize the PUC to issue long-term debt (revenue bonds) with less frequency, thereby reducing the PUC's SSIP-related borrowing costs. Increasing the Wastewater Commercial Paper Program does incur an annual financing fee of approximately $975,000 that is included in the PUC's Wastewater capital budget.

### Recommendation

Approve the proposed ordinance.

## MANDATE STATEMENT & BACKGROUND

### Mandate Statement

Under San Francisco Charter Section 8B.124, the San Francisco Public Utilities Commission (PUC) is authorized to issue revenue bonds, including notes, commercial paper or other forms of indebtedness for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities, subject to approval by two-thirds of the Board of Supervisors. The Board of Supervisors authority to authorize the issuance of debt under Charter Section 8B.124 is subject to (a) certification from an independent engineer that (i) the projects to be financed by such debt meet utility standards and (ii) estimated net revenue will be sufficient to meet operating, maintenance, debt service coverage and other indenture or resolution requirements, and (b) certification by the San Francisco Planning Department that facilities under the PUC's jurisdiction that are to be funded by such debt will comply with the California Environmental Quality Act (CEQA).

### Background

In January 2009, the PUC began planning the Sewer System Improvement Project (SSIP) to overhaul San Francisco's municipal sewer and stormwater treatment and collection systems (together, "the sewer system"). The SSIP consists of approximately 20 sewer system capital improvement projects to be constructed from 2011 through 2040 at an estimated cost of $6.9 billion. According to Ms. Karen Kubick, PUC Wastewater Enterprise Capital Program Director, the PUC expects to complete or commence 17 of the 20 sewer system capital improvements and expend and/or encumber $6.0 billion in costs in the first 15 years of the SSIP, between 2011 and 2026. The SSIP was included in the City's Ten Year Capital Expenditure Plan, previously approved by the Board of Supervisors on March 29, 2011 (File 11-0284).

The SSIP is primarily funded through the use of PUC Wastewater Revenue Bonds, which will be repaid from sewer service fee revenues charged to San Francisco residents and businesses. The PUC may initially issue short-term indebtedness, including the issuance of Commercial Paper, in anticipation of the issuance of its Wastewater Revenue Bonds. On October 31, 2006, the Board of Supervisors authorized the PUC to issue Commercial Paper for Wastewater Enterprise capital improvements in an aggregate principal amount not to exceed $150,000,000 (File 06-1298). On April 27, 2010, the Board of Supervisors authorized the PUC to issue $297,756,235 in Wastewater Revenue Bonds for the SSIP (File 10-0340).

On December 13, 2011 the PUC Commission authorized an increase of $150,000,000 in commercial paper from $150,000,000 to $300,000,000 to provide additional short-term financing of Wastewater capital projects, including SSIP-related costs. According Mr. Frank McPartland, Capital Project Budget Manager for the PUC, as of April 19, 2012, the PUC had expended, allocated, or encumbered $146,871,000 against its existing $150,000,000 Wastewater Commercial Paper issuance authorization, leaving a balance of $3,129,000.

## DETAILS OF PROPOSED LEGISLATION

The proposed ordinance would authorize an increase of the San Francisco Public Utilities Commission (PUC) Wastewater Enterprise's Commercial Paper program by $150,000,000, from an amount not to exceed $150,000,000 to an amount not to exceed $300,000,000 to finance various SSIP-related capital projects.

Table 1, below, lists the SSIP and other Wastewater capital projects included in the PUC's FY 2011-12 Capital Budget, totaling an estimated $124,311,550, that are projected to be expended, allocated, or encumbered against the requested additional requested $150,000,000 in Wastewater Commercial Paper issuance authorization. In addition, the PUC anticipates requiring an additional $25,688,450 in Wastewater Commercial Paper authorization for FY 2012-13 capital projects through February 2013, for a total estimated additional Wastewater Commercial Paper authorization need of $150,000,000

**Table 1. Anticipated Expenditures, Allocations, and/or Encumbrances, from FY 2011-12 through February 2013**

| FY 2011-12 Project Title | FY 2011-12 Remaining |
|---|---|
| Sewer Repair | $31,196,000 |
| Treatment Facilities Improvements | 43,700,000 |
| Treasure Island Capital Improvements2 | 3,000,000 |
| Biofuel Alternative Energy Program | 2,000,000 |
| Low Impact Design Project | 1,500,000 |
| WWE RNR Collection System | 7,445,550 |
| Outfall Inspection/Receiving Water | 3,500,000 |
| Central Bayside System Improvements | 15,000,000 |
| Biosolids/Digester Project Budget | 13,000,000 |
| SSIP Planning Project | 2,000,000 |
| Bayside & Westside Pump Stations | 1,020,000 |
| Richmond Basin Improvements | 950,000 |
| **Total FY 2011-12 Projects** | **$124,311,550** |
| Estimated Project Costs through February 2013 | $25,688,450 |
| **Total Anticipated Commercial Paper Need Prior to February 2013 Bond Issuance** | **$150,000,000** |

As is discussed in the Background section above, as of April 19, 2012 the PUC had expended, allocated, or encumbered $146,871,000 against its existing $150,000,000 Wastewater Commercial Paper issuance authorization, leaving a balance of $3,129,000. However, the PUC is requesting a full additional $150,000,000 in Wastewater Commercial Paper authorization in

order to provide the PUC with flexibility for funding capital projects through February 2013 and throughout the life of the SSIP.

As is noted in the Mandate Statement section above, the Board of Supervisors' authority to authorize an issuance of debt under Charter Section 8B.124 is subject to (a) certification from an independent engineer that (i) the projects to be financed by such debt meet utility standards and (ii) estimated net revenue will be sufficient to meet operating, maintenance, debt service coverage and other indenture or resolution requirements, and (b) certification by the San Francisco Planning Department that facilities under the PUC's jurisdiction that are to be funded by the bonds will comply with the California Environmental Quality Act (CEQA). According to Mr. Mike Brown, Capital Finance Analyst for the PUC, these conditions have been met and the related documentation has been filed with the Clerk of the Board.

As is noted in the Mandate Statement section above, under City Charter Section 8B.124, approval of the proposed ordinance requires two-thirds of the Board of Supervisors.

## FISCAL IMPACT

Any Commercial Paper costs would be refunded by revenue from Wastewater Revenue Bonds, which are projected to be issued in February 2013 in an amount of up to $297,756,235, as previously authorized by the Board of Supervisors. The debt service on the Wastewater Revenue Bonds is repaid from sewer service fee revenues.

According to PUC Deputy CFO Mr. Charles Perl, the proposed ordinance would allow the PUC to proceed with the SSIP with greater efficiency by authorizing an increase of an amount not-to-exceed $150,000,000 in Commercial Paper, which would result in issuing long-term debt with less frequency, thereby reducing the PUC's borrowing costs. Mr. Perl notes that current estimated average Commercial Paper rates of 0.97 percent provide a low cost, short-term financing alternative to Wastewater Revenue Bonds. According to Mr. Brown, the PUC's 0.97 percent Wastewater Commercial Paper rate consists of (a) dealer fees of 7 basis points, (b) interest of 25 basis points, and (c) bank fees of 65 basis points, for a total of 97 basis points, or 0.97 percent. According to Mr. Brown, the bank fees of 65 basis points are charged to the PUC regardless of the amount of outstanding Wastewater Commercial Paper. Therefore, increasing the Commercial Paper allocation by $150,000,000 would result in a corresponding annual cost of $975,000 (0.65 percent of $150,000,000). According to Mr. Brown, the Wastewater Commercial Paper Program fee would be included the PUC's Wastewater capital budget.

As compared to the 0.97 percent for Commercial Paper, the PUC estimates that the issuance of Water Revenue Bonds at this time would result in interest rates of 4.5 percent to 5.0 percent.

## POLICY CONSIDERATION

### The Alternatives to Increasing PUC's Wastewater Commercial Paper Not-to-Exceed Limit Include Issuing Long-term Debt

According Mr. McPartland, as of April 19, 2012, the PUC had expended, allocated, and/or encumbered $146,871,000 against its existing $150,000,000 Wastewater Commercial Paper issuance authorization. Because, as shown in Table 1 above, the PUC anticipates a need of an additional $150,000,000 for expenditures for SSIP projects and other Wastewater capital improvements, the PUC either has to issue an estimated up to $150,000,000 of long-term debt to fund such projects, or request the proposed subject increase of Wastewater Commercial Paper in a not-to-exceed amount of $150,000,000. The advantage of utilizing Commercial Paper is that it would allow the PUC to delay issuance of SSIP Wastewater Revenue Bonds from Spring/Summer 2012 until Spring 2013 and allow the PUC to issue long-term debt with less frequency over the life of SSIP. As noted above in the Fiscal Impact section of this report, the interest rate paid on Commercial Paper is presently estimated at 0.97 percent, as compared to the estimated 4.5 to 5.0 percent interest rates on Wastewater Revenue Bonds.

## RECOMMENDATION

Approve the proposed ordinance.

San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission

1155 Market Street, 11th Floor
San Francisco, CA 94103
T 415.554.3155
F 415.554.3161
TTY 415.554.3488

**TO:** **Angela Calvillo, Clerk of the Board of Supervisors**

**FROM:** **Nathan Purkiss, 554-3404**

**DATE:** **4/9/12**

**SUBJECT:** **Ordinance authorizing increase of SFPUC Wastewater Enterprise Commercial Paper Program**

---

Please find the original and 4 copies of a Board of Supervisors ordinance authorizing an increase of the Wastewater Enterprises Commercial Paper Program to an amount not to exceed $300,000,000. The entire packet includes:

1. Board of Supervisor's Ordinance authorizing an increase of the Wastewater Enterprises Commercial Paper Program to an amount not to exceed $300,000,000.
2. Signed copy of SFPUC Commission Resolution 11-0197, and the SFPUC Agenda Item related to this resolution.
3. Proposition E Certificates related to this ordinance
4. Ordinance #93-10 referenced in the introduced ordinance.

Please contact us if you need any additional information on these items.

**Departmental representative to receive a copy of the adopted resolution:**

Name: Nathan Purkiss
Phone: 554-3404

Interoffice Mail Address: 1145 Market Street, 7th Floor

**Edwin M. Lee**
Mayor

**Anson Moran**
President

**Art Torres**
Vice President

**Ann Moller Caen**
Commissioner

**Francesca Vietor**
Commissioner

**Vince Courtney**
Commissioner

**Ed Harrington**
General Manager

San Francisco Water Power Sewer

Services of the San Francisco Public Utilities Commission

# AGENDA ITEM
## Public Utilities Commission
*City and County of San Francisco*

DEPARTMENT Financial Services AGENDA NO. **15**

MEETING DATE December 13, 2011

**Wastewater Commercial Paper Program Increase from $150 million to $300 million:**
Regular Calendar

**Project Manager:** Charles Perl

**Authorize an Increase of the Wastewater Commercial Paper Notes Program to $300 million from $150 million:**

| | |
|---|---|
| **Summary of Proposed Commission Action** | **Authorize** an increase in the San Francisco Public Utilities Commission's Wastewater Enterprise Commercial Paper Notes Program (Program) to $300,000,000 from $150,000,000; direct the General Manager to request approval from the Board of Supervisors for such increase; and direct the General Manager to solicit and negotiate banking proposals to provide bank credit facilities to support such increase. |
| | |
| **Background and Description of Scope of Services:** | The Wastewater Commercial Paper Program provides access to low-cost, short-term financing for Wastewater Enterprise capital projects, the Wastewater Enterprise's Capital Improvement Program (CIP) and Sewer System Improvement Program (SSIP) in advance of the issuance of long-term Wastewater Revenue Bonds. The credit markets require that a commercial paper program have credit support through a letter of credit or liquidity facility.<br><br>On July 27, 2010, Commission Resolution 10-0114 established certain Levels of Service Goals for the proposed SSIP. These goals anticipated the issuance of more than $4 billion of revenue bonds over the following decade if projects within the proposed SSIP are approved and implemented.<br><br>Currently, the Wastewater Enterprise is implementing capital projects budgeted in FY 2010-11 and FY 2011-12 with a total appropriation of |

**APPROVAL:**

DEPARTMENT / BUREAU

FINANCE Todd L. Rydstrom

COMMISSION SECRETARY Mike Housh

GENERAL MANAGER Ed Harrington

| | |
|---|---|
| | $271.2 million. Until the next revenue bond issuance, the projects can be partially financed by the existing $150 million Wastewater Enterprise commercial paper program authorized under Proposition E.<br><br>The current commercial paper capacity meets the Wastewater Enterprise's expenditure and encumbrance needs through March 2012, after which time the Wastewater Enterprise will need to either increase the size of its commercial paper program or issue long-term revenue bonds. Due to commercial paper's low cost and flexibility relative to long-term revenue bonds, staff recommends increasing the size of the commercial paper program to $300 million from $150 million. An increase by $150 million will ensure adequate capacity to meet the already authorized capital projects for FY 2010-11 and FY 2011-12, and will also provide some capacity, if needed, to fund a portion of FY 2012-13 projects, if finally approved. Without an increase in commercial paper, the Wastewater Enterprise would have to sell revenue bonds in the Spring of 2012 to meet projected expenditure needs. With an increase in the commercial paper capacity to $300 million, the next long-term Wastewater Revenue Bond sale is anticipated in the Spring of 2013.<br><br>The advantage to delaying the issuance of bonds until the Spring of 2013 would be that the sale could coincide with a potential refunding of the 2003 Wastewater Revenue Bonds which, in addition to providing debt service savings at current interest rates, would trigger the already adopted springing amendment which then allows the debt service reserve to be funded at 50% of Maximum Annual Debt Service instead of 100% of Maximum Annual Debt Service. This change would put the Wastewater Enterprise on par with the Water Enterprise in terms of this provision and generates savings of approximately $6.6 million for every $100 million of debt issued. |
| | |
| **Result of Inaction:** | A delay in this authorization could accelerate the frequency of long-term bond issuances, which would include higher associated borrowing costs. |
| **Budget & Costs:** | The Wastewater Enterprise capital budget and associated appropriations cover these associated costs. |
| | |
| **Recommendation:** | SFPUC staff recommends that the Commission adopt the attached resolution. |
| | |
| **Attachments:** | 1. SFPUC Resolution<br>2. Presentation |

# PUBLIC UTILITIES COMMISSION

City and County of San Francisco

RESOLUTION NO. **11-0197**

WHEREAS, On November 5, 2002, the voters of the City and County of San Francisco (the "City") approved Proposition E, which among other things, authorized the San Francisco Public Utilities Commission (the "Commission") to issue indebtedness, including revenue bonds, notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors of the City (the "Board"), for the purpose of reconstructing, replacing, expanding, repairing or improving wastewater facilities under the jurisdiction of the Commission (the "Wastewater Enterprise"); and

WHEREAS, Pursuant to Section 43.5 of the San Francisco Administrative Code, enacted by Ordinance No 203-98 adopted by the Board on June 8, 1998, and signed by the Mayor of the City on June 19, 1998, the Board established a procedure pursuant to which the Commission may issue short-term indebtedness, including the issuance of commercial paper in anticipation of the issuance of its revenue bonds; and

WHEREAS, Under Section 8B.124 of the Charter of the City (the "Charter"), the Board's authority to authorize an issuance of debt under Proposition E is subject to its receipt of a certification from an independent engineer that (i) the projects to be financed by such debt meet utility standards and (ii) estimated net revenue will be sufficient to meet operating, maintenance, debt service coverage and other indenture or resolution requirements (the "Engineer Certification"); and

WHEREAS, The Board's authority to authorize an issuance of debt under Proposition E is also subject to its receipt of a certification from the San Francisco Planning Department that facilities financed with such debt will comply with applicable requirements of the California Environmental Quality Act (together with the Engineer Certification, the "Proposition E Certificates"); and

WHEREAS, The Commission (Resolution No. 06-0164) and the Board (Ordinance No. 266-06) have previously authorized the issuance of commercial paper notes for the Wastewater Enterprise in an aggregate principal amount not to exceed $150,000,000 against Proposition E authorization; and

WHEREAS, on July 27, 2010, Commission Resolution 10-0114 established Levels of Service Goals for the proposed Sewer System Improvement Program Goals, which anticipates the issuance of more than $4 billion dollars of revenue bonds over the upcoming decade if projects within the SSIP are approved and implemented; and

WHEREAS, the Commission has determined that it is desirable to provide $150,000,000 additional short-term financing of capital improvements, capitalized interest and related costs for improvements, betterments and additions to the Wastewater Enterprise of the City through the increase in the amount which may be outstanding at any one time, increasing authorization to $300 million from $150,000,000 of commercial paper notes, exclusive of interest reserve, if applicable (the "Notes") or bank notes (the "Bank Notes"); and

WHEREAS, Certificates meeting the Proposition E requirements are on file with the Clerk of the Board in File No. 061298 and as part of Ordinance No. 266-06, and revised Proposition E Certificates describing additional proposed improvements to the facilities of the Wastewater Enterprise are needed; and

WHEREAS, The Commission has determined that it is necessary and desirable to make certain additional improvements to the facilities of the Wastewater Enterprise (the "Improvements"), and has further determined to finance the Improvements through the issuance of wastewater revenue bonds, and in anticipation of the issuance of such wastewater revenue bonds, through the expansion of the use of the Commission's commercial paper program and the issuance and reissuance of its commercial paper notes from time to time; and

WHEREAS, On April 27, 2010, the Board adopted Ordinance No. 95-10 appropriating $348,064,054 for the Wastewater Enterprise's Capital Improvement Program and Sewer System Improvement Program for Fiscal Years 2010-2011 and 2011-2012, of which $297,756,241 is to be funded by revenue bond proceeds or other forms of indebtedness, and placing $329,962,235 on Controller's reserve pending the issuance of such revenue bonds or other forms of indebtedness and/or the receipt of other fees and revenues; and

WHEREAS, On July 26, 2011, the Board adopted Ordinance No. 147-11, the Annual Appropriation Ordinance, increasing the amount of the $348,064,054 appropriation to be funded by revenue bond proceeds or other forms of indebtedness from $297,756,241 to $327,756,241; and

WHEREAS, The Commission reasonably expects to reimburse certain capital expenditures incurred prior to the execution and delivery of the commercial paper with proceeds derived from the financing and hereby declares its official intent to reimburse certain expenditures for capital equipment from future financing proceeds for purposes of complying with certain provisions of the Internal Revenue Code of 1986, as amended; and,

WHEREAS, Section 1.150.2 of the Treasury Regulations requires that the SFPUC declare its reasonable official intent to reimburse prior expenditures with proceeds of the commercial paper; now, therefore, be it

RESOLVED, That the Commission hereby authorizes the issuance and sale of existing commercial paper notes (the Commercial Paper Notes") to temporarily finance a portion of the design, acquisition and construction of the additional Improvements, as well as paying costs of issuance and other incidental costs, provided, however, that (i) the maximum principal amount of Commercial Paper Notes at any one time outstanding, when combined with the total principal amount of outstanding and unpaid obligations issued to the provider(s) of any credit or liquidity facility (the "Liquidity Provider") executed in connection with such Commercial Paper Notes, shall increase to a not to exceed principal amount of $300,000,000 from a not to exceed principal amount of $150,000,000, exclusive of interest reserve, if applicable, (ii) the principal amount of Commercial Paper Notes outstanding at any one time shall not exceed the principal component available to be drawn under any credit facilities or liquidity facilities (the "Liquidity Facility") executed in connection therewith (as authorized below); and (iii) the Commercial Paper Notes shall not mature later than five (5) years from their respective date of issuance (provided that obligations issued to the Liquidity Provider may have a longer maturity) and have a maximum rate or rates of interest of not to exceed twelve percent (12%) per annum. The Commercial Paper Notes (and any repayment obligations owing to the Liquidity Provider) may, in the discretion of the General Manager upon recommendation by the Commission, be subordinate to the payment of the Wastewater Revenue Bonds (including any wastewater revenue bonds current outstanding). The authorization of the Commercial Paper Notes pursuant to this Resolution is in

addition to the authorization of any commercial paper notes authorized by Resolution 06-0164 of this Commission or any other prior resolution or ordinance; and be it

FURTHER RESOLVED, Pursuant to Treasury Regulation Section 1.150-2, the SFPUC hereby declares its intent to reimburse itself, from financing proceeds, for capital expenditures paid within sixty (60) days prior to the effective date of this resolution and other expenditures permitted to be reimbursed pursuant to Treasury Regulation Section 1.150-2. Any reimbursement allocation of financing proceeds to be made with respect to expenditures incurred prior to the execution and delivery of the commercial paper (excluding certain de minimis expenditures and preliminary expenditures in an amount not to exceed twenty percent (20%) of the issue price of the commercial paper) will occur not later than eighteen (18) months after the later of (i) the date on which the expenditure is paid, or (ii) the date on which the facilities are placed in service, but in no event more than three (3) years after the expenditure is paid. Further, any reimbursable cost will be of a type properly chargeable to a capital account under general federal income tax principles; and be it

FURTHER RESOLVED, That revised Proposition E Certificates describing additional improvements to the facilities of the Wastewater Enterprise have been completed and are herein incorporated by reference; and be it

FURTHER RESOLVED, That the Board of Supervisors is hereby urged to authorize by resolution or ordinance, as the case may be, an increase of commercial paper program for the Wastewater Enterprise in an amount up to $300,000,000 for the purpose of providing low cost and flexible financing for the capital programs of the Wastewater Enterprise; provided that the sole source of repayment of such commercial paper notes or bank notes, as the case may be, shall be from the Wastewater Enterprise revenues; and be it

FURTHER RESOLVED, That, subject to Board of Supervisors approval, the General Manager or his appointed designee is hereby authorized and directed to take any and all necessary action expeditious to the issuance of the Commercial Paper Notes and the expansion of a commercial paper program for the Wastewater Enterprise, including but not limited to, the Commercial Paper Notes, and all prior actions heretofore taken towards that end are hereby ratified, approved and confirmed by this Commission; provided, however, that the General Manager or his appointed designee is hereby authorized and directed to return to this Commission for approval of any bank credit facilities negotiated with any bank in connection with the terms of this Resolution..

*I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of* December 13, 2011

Michael Hardy

*Secretary, Public Utilities Commission*

**Certificate of the Consulting Engineers**
**in connection with Section 8B.124 of the Charter of the City and County of San Francisco and Section 3.06(c)(1)(B) of the Indenture of the San Francisco Public Utilities Commission (SFPUC) authorizing the issuance of SFPUC Commercial Paper**

This Certificate has been prepared by Parsons Environment & Infrastructure, Inc., (Parsons) at the request of the San Francisco Public Utilities Commission (SFPUC) in support of the SFPUC Wastewater Commercial Paper Issuance, as required under Section 8B.124 (a) (i) and (ii) of the San Francisco Charter. Parsons is an independent engineering firm retained by the SFPUC to provide the certification.

This Certificate is divided into Sections A and B. Section A, Certification of the Interim Capital Improvement Program (CIP), Sewer System Improvement Program (SSIP), and Renewal and Replacement Program (R&R) certifies that the anticipated projects to be financed by the proposed Commercial Paper Notes (the "Notes") including the prioritization, cost estimates and scheduling, meet utility industry standards. Section B, Certification of Note Requirements, certifies that the estimated net revenue after payment of operating and maintenance expenses and estimated repair and replacement costs, should be sufficient to meet debt service coverage and other indenture or resolution requirements, including debt service requirements on the Notes under the proposed plan of finance, as well as debt service on all Parity and Senior Wastewater obligations.

The findings and conclusions in this Certificate are based on Parsons' review of the following references and data:

1. Wastewater Enterprise Capital Improvement Program Quarterly Report – (August 1, 2011 to October 29, 2011), December 9, 2011.

2. City and County of San Francisco Public Utilities Commission Wastewater Enterprise: Proposed Budgets for FY 2012-13 and FY 2013-14; Existing Budgets for FY 2010-11 and FY 2011-12.

3. Meetings and discussions with SFPUC staff.

While developing the Certificate, Parsons reviewed the references and data and consulted with SFPUC staff. This Certification of the CIP is based on the information provided by the SFPUC. The conclusions, observations, and recommendations contained herein constitute only the opinions of Parsons. The various background documents, statements, and other information supplied by the SFPUC, its employees, and other consultants have been relied upon as being accurate in the performance of these analyses; however, no assurances are given nor warranties implied by Parsons as to the accuracy of such information. Parsons makes no certification and gives no assurances except as explicitly set forth in this document.

WWE PROGRAM DESCRIPTION

The responsibilities of the SFPUC's Wastewater Enterprise (WWE) are to manage, operate, and maintain San Francisco's wastewater collection and treatment system. This is accomplished through three separate but related programs:

- Sewer System Improvement Program
- WWE Interim Capital Improvement Program

- WWE Renewal and Replacement Program

Sewer System Improvement Program

WWE is currently developing a comprehensive, multi-billion-dollar Sewer System Improvement Program (the SSIP). When complete, the SSIP will provide a long-term strategy for the management of the City's wastewater and stormwater system for the next 30 years. The SSIP will provide a detailed capital planning roadmap for necessary improvements, address specific challenges facing the system, maximize system reliability and flexibility, and estimate the funds necessary to implement these improvements. The SSIP will include Levels of Service (LOS) for regulatory and environmental benefits, operational and seismic reliability and sustainability, and community benefits to address the long-term needs of the City's wastewater and stormwater system. The LOS which are specific to the WWE and which were endorsed by the SFPUC's Commission on July 27, 2010 include:

- Provide a complete, reliable, resilient, and flexible system that can respond to catastrophic events;
- Minimize flooding;
- Provide benefits to impacted communities;
- Modify the system to adapt to climate change; and
- Achieve economic and environmental sustainability.

Currently, SFPUC staff is working with the Commission to finalize scope and projects for the SSIP.

WWE Interim Capital Improvement Program

As a precursor to the SSIP, an Interim CIP was proposed in 2005 to address the more immediate needs of the WWE. The Interim CIP is therefore a multi-year program to meet operational needs of the WWE prior to the implementation of the SSIP. The projects in the Interim CIP address system reliability issues, critical needs of aging infrastructure, and upgrades to treatment facilities and pump stations by funding projects to repair corrosion damage, improve ventilation, and upgrade major electrical and mechanical systems. The Interim CIP also addresses capacity improvements for sewer mains to reduce the frequency and severity of flooding during heavy rains. Finally, the Interim CIP addresses the reduction of odors by funding projects to cover, vent, and treat odors at the Southeast Plant.

WWE Renewal and Replacement Program

The WWE Renewal and Replacement Program (R&R) is a continuing annual program that seeks to address deficiencies in two wastewater infrastructure categories: R&R Collection System; and R&R Treatment Facilities. The goal of the R&R Program is to meet the endorsed levels of service goals, regulatory permit compliance, system reliability and functionality, and sustainable operations of the City's sewer system. The R&R Program also complies with the State of California requirement that a provision be made for the periodic repair and replacement of sewer system facilities.

SECTION A: CERTIFICATION OF INTERIM CIP, SSIP, AND R&R

Parsons' review of the references and data for Section A included a "programmatic approach" such that Parsons certifies that the commercial paper proceeds are intended to be used by the SFPUC to fund the capital projects included in the Wastewater Enterprise's Interim CIP, SSIP, and R&R Programs included in

this commercial paper program. Projects may be moved on or off the CIP list, delayed or accelerated as necessary due to scheduling, budgeting, or other constraints.

Based upon our analysis and review of the data and analysis provided by the SFPUC, Parsons certifies that the projects to be financed by the commercial paper program, as identified in the Wastewater Enterprise Interim CIP, SSIP, and R&R Programs including the prioritization, cost estimates and scheduling, meet generally accepted utility standards.

SECTION B: CERTIFICATION OF BOND REQUIREMENTS

Parsons conducted a financial analysis evaluating the adequacy of revenues generated by the SFPUC Wastewater Enterprise to meet annual operating and debt service coverage requirements. The financial analysis was developed based on historical financial data provided by the SFPUC from FY 2010-11 and FY 2011-12, projected financial data from FY 2012-13, other relevant information, and consultations with Financial Services staff.

A five-year financial projection for the SFPUC Wastewater Enterprise has been developed through FY 2015-16 and is presented in Table 1. As shown in Table 1, wastewater service charges are projected to be the major source of revenues to cover debt service. The detailed analysis has been included in Attachment B.

The principal assumptions underlying the financial projections are as follows:

- The SFPUC will implement all forecast rate increases as projected within the 2006 wastewater rate model, as shown in Table 1, maintaining a 1.0 coverage ratio for annual operating and maintenance revenues to expenditures, including debt service obligations.
- Growth in equivalent single-family dwelling units (EDUs) is assumed to be insignificant through FY 2015-16 and is a small component of the overall costs and revenues associated with the financial projections. Consequently, no annual wastewater volume increase is projected throughout the period of the analysis.
- Interest earnings on fund balances are assumed at 2 percent.
- Operations and maintenance expenses are assumed to be escalated at an annual rate of 3 percent as projected by the SFPUC. Additional costs are included for New Programs and Other Adjustments as provided by Financial Services staff. At the time of preparation of this Certificate, no new operating expenses have yet been identified as part of the Wastewater Master Plan currently in development.
- Capital expenditures through FY 2011-12 are based on the Interim CIP, since the SSIP is currently being finalized. Based on the SFPUC preliminary capital spending forecast, $100 million (in current dollars) is projected to be expended annually beginning in FY 2012-13. Table 1 presents the latest cost estimates provided by the SFPUC.
- The SFPUC will issue bonds each year aligned with the projected CIP funding requirements. Each projected bond assumes: a July 1 issue date; bond issuance cost at 1 percent of net bond proceeds; availability of bond issuance; a 30-year bond term with interest-only payments for the first two bond years and level annual debt service payments thereafter; 5.5 percent average fixed interest rate; two years of capitalized interest (net funded assuming 4.5 percent interest earnings); debt service reserve requirements borrowed at the time of issuance; insurance

premium of 0.25 percent; and reserve fund earnings based on a 5.5 percent interest rate (the same as the bond rate).

- In the financial analysis, Parsons calculated the future debt service payments using Revenue Bond assumptions as opposed to the terms set forth in Commercial Paper issuances. This assumption requires immediate cash flow impacts whereas the Commercial Paper delays the impact, and is therefore more conservative.
- Pursuant to the Indenture, the payments on outstanding debt are based on actual maturity schedules. Table 1 presents the Debt Service Schedule by Fiscal Year.
- The analysis assumes capitalized interest and interest earnings on cash-funded reserve funds will be applied on the bond interest payment dates.
- Current SFPUC financing documents require that net revenues after Senior State Loan requirements plus unappropriated fund balance available for the payment of debt service equal or exceed 125 percent of annual debt service.
- The debt service reserve must be equal to the lesser of Maximum Annual Debt Service or 125 percent of Average Annual Debt Service.
- As a recipient of State and Federal Grants under the Clean Water Act, the Wastewater Enterprise is required to include annual funding for renewal and replacement (R & R) as part of its annual operations and maintenance budget. A Board of Supervisors resolution set the minimum R & R at $5 million and requires the expenditure to increase at least 5 percent annually until the amount of the annual contribution reaches $20 million. It is projected that the R & R expenditure will reach $20 million in FY 2011-12.
- The SFPUC adopted a Wastewater Capacity Charge on May 22, 2006. This charge is imposed on customers creating new or increased demands for utility service. The estimated annual revenue potential of the Capacity Charge is between $4.6 million and $5.1 million. In light of the newly adopted fee and due to the unpredictable nature of growth, this source of revenue has been excluded from the analysis. However, for legal purposes, statutory requirements allow revenues derived from a Capacity Charge to be applied to capital projects and/or payment of debt service. Pursuant to the Bond Indenture, any funds that are available for payment of debt service and are not budgeted to be spent can be used to meeet the debt coverage requirements.

Based upon our review, the assumptions discussed in this Certificate, and our review of the data and analysis provided by the SFPUC, Parsons concludes the following:

- In accordance with Article III, Section 3.05 (f) of the January 1, 2003 Clean Water Revenue Bond Indenture, the SFPUC Wastewater Enterprise has met operating and maintenance debt coverage service requirements for the past seven years and is projected to meet these requirements for the subsequent three years. This conclusion is based on reasonable assumptions and should fairly reflect the financial performance of the wastewater system, assuming the SFPUC adopts rate increases as projected within its wastewater revenue forecast.

In the opinion of Parsons, the projected wastewater service fees should provide revenue sufficient to:

- Meet projected costs of operations, maintenance, and routine replacement of sewer system facilities.

- Meet the existing debt service obligations and the projected requirements for the 2003 Refunding Revenue Bonds, State Revolving Fund Loans, and proposed Commercial Paper issuances.
- Provide sufficient revenue to pay the costs of the Five-Year Wastewater Improvement Program scheduled through FY 2015-16.
- Meet reserve requirements of bond resolution.
- Meet all other obligations of the SFPUC including charges, liens, or encumbrances on or payable from revenues of the Wastewater Enterprise.

The funds obtained from the sale of Commercial Paper, current cash reserves, and fees collected will be adequate to fund current projects as forecast.

The complete financial analysis is included in Attachment B.

Dated this 5th day of April, 2012

Parsons Environment & Infrastructure, Inc.

By: Paul S. Skager

Paul S. Skager, P. E.
Vice President

Table 1
Cash Flow Summary
Sewer System Master Plan
City and County of San Francisco

Attachment A
Interim Wastewater Capital Improvement Program
Spending Plan

Attachment B
Financial Analysis

Attachment C
Glossary of Financial Terms

Attachment D
Wastewater Enterprise Projects by Fiscal Year

# ATTACHMENT D

# WASTEWATER ENTERPRISE PROJECTS BY FISCAL YEAR

As part of the CIP Certification process, Wastewater Enterprise (WWE) projects were segregated into fiscal tears FY 2010-11, FY 2011-12, and FY 2012-13. The projects were reviewed with the individual project managers to ensure conformance with project cost and schedule parameters and environmental documentation requirements.

The three tables below summarize the projects by fiscal year indicating project identifier, title, financial information, and project manager. Individual project summaries by fiscal year are presented following the three tables.

## Table D-1. SFPUC Wastewater Enterprise Projects for FY 2010-11

WASTEWATER ENTERPRISE PROJECTS FY 2010-11

| Program | projectx1 | FirstOfProjTitle1 | fund-type | sfund | Budget | YTD Actual | PTD Actual | Encumb | Balance | Project Manager |
|---|---|---|---|---|---|---|---|---|---|---|
| ICIP | CENMSCIC23 | SUNNYDALE SEWER IMPROVEMENTS | 5C | CPF11A | 7,000,000 | 0 | 0 | 0 | 7,000,000 | MWong |
| ICIP | CENMSCIC31 | SEWPCP 620 & 680 DIGESTER COMPRESSOR | 5C | CPF11A | 180,000 | 0 | 0 | 0 | 180,000 | JDesai |
| ICIP | CENMSCIC34 | FOLSOM ST SEWER REPLACEMENT | 5C | CPF11A | 70,000 | 70,000 | 70,000 | 0 | 0 | JWong |
| ICIP | CENMSCIC36 | WWE FACILITY SECURITY/EMERGENCY RESPONSE | 5C | CPF11A | 3,750,000 | 16,154 | 16,154 | 0 | 3,733,846 | JDesai |
| ICIP | CENMSCIC37 | WWE FACILITY RELIABILITY IMPROVEMENTS | 5C | CPF11A | 11,609,200 | 1,472,964 | 1,872,207 | 8,429,868 | 1,307,126 | JDesai |
| ICIP | CENMSCIC38 | SEP SOLIDS HANDLING IMPROVEMENTS | 5C | CPF11A | 2,625,000 | 268,105 | 450,621 | 686,002 | 1,488,377 | JDesai |
| ICIP | CENMSCIC39 | OCEANSIDE SOLIDS HANDLING IMPROVEMENTS | 5C | CPF11A | 11,671,815 | 1,287,521 | 1,567,713 | 785,937 | 9,318,165 | JDesai |
| ICIP | CENMSCIC40 | MARIPOSA/NORTHSHORE RELIABILITY | 5C | CPF11A | 5,904,100 | 2,954,480 | 3,419,474 | 2,372,092 | 112,534 | JDesai |
| ICIP | CENMSCIC42 | SWOO STABILIZATION EMERGENCY WORK | 5C | CPF11A | 215,000 | 0 | 0 | 215,000 | 0 | RCayabyab |
| ICIP | CENMSCIC43 | RICHMOND DRAINAGE PH. 2 | 5C | CPF11A | 465,000 | 0 | 0 | 0 | 465,000 | BTam |
| ICIP | CENMSCIC44 | CESAR CHAVEZ PH. 2 | 5C | CPF11A | 100,000 | 0 | 0 | 0 | 100,000 | BTam |
| ICIP | CENMSCIC48 | CHANNEL PUMP STATION III | 5C | CPF11A | 5,405,385 | 826,291 | 943,470 | 4,131,132 | 330,783 | JDesai |
| ICIP | CENMSCIC50 | AS-NEEDED SEWER REPLACEMENT CONTRACT #1 | 5C | CPF11A | 3,116,012 | 60,560 | 176,703 | 2,291,300 | 648,009 | JWong |
| ICIP | CENMSCIC51 | SPOT SEWER REPAIR CONTRACT #25 | 5C | CPF11A | 4,310,000 | 1,876,119 | 3,722,273 | 431 | 587,296 | JWong |
| ICIP | CENMSCIC53 | DOWNTOWN DISTRICT SEWER REPAIR | 5C | CPF11A | 840,000 | 89,820 | 120,853 | 0 | 719,147 | JWong |
| ICIP | CENMSCIC55 | CHURCH ST/DUBOCE SEWER REPLACEMENT | 5C | CPF11A | 1,035,000 | 150,528 | 150,707 | 690,354 | 193,939 | JWong |
| ICIP | CENMSCIC56 | POWELL/MASON SEWER REPLACEMENT | 5C | CPF11A | 510,000 | 211,647 | 267,549 | 0 | 242,451 | BTam |
| ICIP | CENMSCIC57 | SEWER STAFF FACILITY IMPROVEMENTS | 5C | CPF11A | 376,400 | 164,134 | 218,990 | 78,939 | 78,471 | RCayabyab |
| ICIP | CENMSCIC58 | VACTOR WASTE STAGING AREA | 5C | CPF11A | 198,600 | 67,649 | 123,082 | 46,570 | 28,948 | RCayabyab |
| ICIP | CENMSCIC59 | SPOT SEWER REPAIR #26 | 5C | CPF11A | 4,230,718 | 68,439 | 105,749 | 3,711,813 | 413,156 | JWong |
| ICIP | CENMSCICSR | SEWER REPAIR | 5C | CPF11A | 2,242,270 | 0 | 0 | 0 | 2,242,270 | MWong |
| ICIP | CENMSCICTF | TREATMENT FACILITIES IMPROVEMENTS | 5C | CPF11A | 9,367,500 | 0 | 0 | 0 | 9,367,500 | JDesai |
| OCIP | CENMSCSP06 | CLEAN WATER MASTER PLAN | 5C | CPF11A | 6,212,000 | 747,434 | 1,209,558 | 1,297,487 | 3,704,955 | CChiu |
| OCIP | CWP11001 | TREASURE ISLAND CAPITAL IMPROVEMENTS | 5C | CPF11A | 3,000,000 | 19,515 | 34,096 | 0 | 2,965,904 | JDesai |
| SSIP | CWWBAE01 | BIOFUEL ALTERNATIVE ENERGY PROJECT | 5C | CPF11A | 2,560,000 | 627,992 | 982,261 | 363,974 | 1,213,765 | CChiu |
| SSIP | CWWLID00 | LOW IMPACT DESIGN PROJECT | 5C | CPF11A | 29,019 | 0 | 0 | 0 | 29,019 | RFGarcia |
| SSIP | CWWLID01 | LOW IMPACT DESIGN PROJECT | 5C | CPF11A | 1,970,981 | 242,043 | 403,038 | 197,943 | 1,370,000 | RFGarcia |
| R&R | CWWRNRCS04 | VARIOUS SEWER LOCATIONS #1 | 5C | CPF11A | 468,000 | 79,773 | 415,109 | 45,679 | 7,212 | JWong |
| R&R | CWWRNRCS22 | BAKER/BLAKE/COOK-SEWER REPAIR/CPFRNR | 5C | CPF11A | 277,000 | 139,896 | 237,992 | 0 | 39,008 | JWong |
| R&R | CWWRNRCS23 | AUBURN ST SEWER REPLACEMENT | 5C | CPF11A | 170,300 | 7,142 | 7,142 | 0 | 163,158 | JWong |
| R&R | CWWRNRCS25 | 21ST/23RD/24TH-HAMPSHIRE/YORK | 5C | CPF11A | 2,762,000 | 1,876,822 | 2,023,398 | 0 | 738,603 | JWong |
| R&R | CWWRNRCS26 | BALBOA ST SEWER REPLACEMENT | 5C | CPF11A | 340,000 | 457 | 654 | 0 | 339,346 | JWong |
| R&R | CWWRNRCS27 | SOMA ALLEY SEWER IMPROVEMENTS | 5C | CPF11A | 238,000 | 56,954 | 58,544 | 0 | 179,456 | JWong |
| R&R | CWWRNRCS28 | 18TH ST EMERGENCY SEWER REPAIR | 5C | CPF11A | 839,000 | 20,771 | 577,707 | 0 | 261,293 | JWong |
| R&R | CWWRNRCS29 | BUCHANAN/PIERCE/FILBERT/MARINA | 5C | CPF11A | 2,047,182 | 83,489 | 85,576 | 1,565,273 | 396,333 | JWong |
| R&R | CWWRNRCS30 | VARIOUS LOCATIONS SEWER REPL#3 | 5C | CPF11A | 1,685,518 | 0 | 0 | 1,656,600 | 28,918 | JWong |
| R&R | CWWRNRCS31 | POST ST EMERGENCY SEWER REPAIR | 5C | CPF11A | 680,000 | 171,144 | 501,398 | 80,177 | 98,425 | JWong |
| R&R | CWWRNROI01 | OUTFALL INSPECTION/RECEIVING WATER | 5C | CPF11A | 3,192,000 | 118,594 | 118,594 | 1,311,767 | 1,761,639 | JDesai |
| SSIP | CWWSIPPL01 | PROGRAM MANAGEMENT | 5C | CPF11A | 5,413,000 | 270,919 | 270,919 | 3,919,537 | 1,222,544 | CChiu |
| | | | | | 107,106,000 | 14,047,355 | 20,151,531 | 33,877,875 | 53,076,594 | |

## Table D-2. SFPUC Wastewater Enterprise Projects for FY 2011-12

WASTEWATER ENTERPRISE PROJECTS FY 2011-12

| Program | projectx1 | FirstOfProjTitle1 | fund-type | sfund | Budget | YTD Actual | PTD Actual | Encumb | Balance | Project Manager |
|---|---|---|---|---|---|---|---|---|---|---|
| ICIP | CENMSCICSR | SEWER REPAIR | 5C | CPF12A | 37,261,000 | 0 | 0 | 0 | 37,261,000 | BTam |
| ICIP | CENMSCICTF | TREATMENT FACILITIES IMPROVEMENTS | 5C | CPF12A | 52,050,000 | 3,982,245 | 11,756,703 | 11,731,892 | 28,561,405 | JDesai |
| OCIP | CWP11001 | TREASURE ISLAND CAPITAL IMPROVEMENTS | 5C | CPF12A | 3,000,000 | 16,816 | 206,024 | 24,400 | 2,769,576 | JDesai |
| SSIP | CWWBAE00 | BIOFUEL ALTERNATIVE ENERGY PROGRAM | 5C | CPF12A | 2,000,000 | 267,836 | 622,104 | 334,056 | 1,043,840 | CChiu |
| SSIP | CWWLID00 | LOW IMPACT DESIGN PROJECT | 5C | CPF12A | 1,500,000 | 111,162 | 272,157 | 328,825 | 899,018 | RFGarcia |
| R&R | CWWRNRCS00 | WWE RNR COLLECTION SYSTEM | 5C | CPF12A | 7,445,550 | 0 | 0 | 0 | 7,445,550 | RCayabyab/JWong |
| OCIP | CWWRNROI01 | OUTFALL INSPECTION/RECEIVING WATER | 5C | CPF12A | 3,500,000 | 0 | 285,234 | 620,967 | 2,593,799 | JDesai |
| SSIP | CWWSIPCT00 | CENTRAL BAYSIDE SYSTEM IMPROVEMENTS | 5C | CPF12A | 15,000,000 | 183,739 | 406,944 | 0 | 14,593,056 | MWong |
| SSIP | CWWSIPDP00 | BIOSOLIDS/DIGESTER PROJECT BUDGET | 5C | CPF12A | 13,000,000 | 83,465 | 237,547 | 0 | 12,762,453 | CChiu |
| SSIP | CWWSIPNC00 | NORTHSHORE TO CHANNEL FORCE MAIN | 5C | CPF12A | 15,000,000 | 0 | 0 | 0 | 15,000,000 | BTam |
| SSIP | CWWSIPPL00 | SSIP PLANNING PROJECT | 5C | CPF12A | 8,300,000 | 0 | 0 | 4,190,456 | 4,109,544 | KKubick |
| SSIP | CWWSIPPS00 | BAYSIDE & WESTSIDE PUMP STATIONS | 5C | CPF12A | 1,020,000 | 0 | 0 | 0 | 1,020,000 | MWong |
| SSIP | CWWSIPRB00 | RICHMOND BASIN IMPROVEMENTS | 5C | CPF12A | 1,000,000 | 0 | 0 | 0 | 1,000,000 | BTam |
| SSIP | CWWSIPUW00 | URBAN WATERSHED ASSESSMENT PROJECT | 5C | CPF12A | 4,000,000 | 0 | 0 | 3,311,155 | 688,845 | KKubick/RFGarcia |
| | | | | | 164,076,550 | 4,645,263 | 13,786,713 | 20,541,751 | 129,748,086 | |

## Table D-3. SFPUC Wastewater Enterprise Projects for FY 2012-13

WASTEWATER ENTERPRISE PROJECTS FY 2012-13

| Program | projectx1 | FirstOfProjTitle1 | fund-type | sfund | Budget | YTD Actual | PTD Actual | Encumb | Balance | Project Manager |
|---|---|---|---|---|---|---|---|---|---|---|
| SSIP | CWWSIPPRPC | SSIP PROGRAM WIDE PROGRAM MANAGEMENT | 5C | CPF13A | 9,000,000 | 0 | 0 | 0 | 9,000,000 | KKubick |
| SSIP | CWWBAE01 | SSIP BIOFUELS/ALTERNATIVE ENERGY STUDIES | 5C | CPF13A | 5,000,000 | 0 | 0 | 0 | 5,000,000 | CChiu |
| SSIP | CWWSIPDP01 | SSIP BIOSOLIDS DIGESTER PHASE 1 | 5C | CPF13A | 18,000,000 | 0 | 0 | 0 | 18,000,000 | CChiu |
| SSIP | CWWSIPTPTS | SSIP TRANSPORT/STORAGE AND CSD STRUCTURES | 5C | CPF13A | 0 | 0 | 0 | 0 | 0 | JDesai |
| SSIP | CWWSIPSEPL | SSIP SOUTHEAST PLANT | 5C | CPF13A | 48,000,000 | 0 | 0 | 0 | 48,000,000 | CChiu |
| SSIP | CWWSIPTPNP | SSIP NORTH POINT FACILITY AND OUTFALLS | 5C | CPF13A | 8,250,000 | 0 | 0 | 0 | 8,250,000 | JDesai |
| SSIP | CWWSIP | SSIP OCEANSIDE PLANT | 5C | CPF13A | 12,500,000 | 0 | 0 | 0 | 12,500,000 | CChiu |
| SSIP | CWWSIPCT01 | SSIP CENTRAL BAYSIDE SYSTEM IMPROVEMENTS | 5C | CPF13A | 6,000,000 | 0 | 0 | 0 | 6,000,000 | MWong |
| SSIP | CWWSIPCSSR | SSIP COLLECTION SYSTEM SEWER IMPROVEMENTS | 5C | CPF13A | 22,806,000 | 0 | 0 | 0 | 22,806,000 | MWong |
| SSIP | CWWSIPCSPS | SSIP PUMP STATION IMPROVEMENTS | 5C | CPF13A | 2,000,000 | 0 | 0 | 0 | 2,000,000 | MWong |
| SSIP | CWWSIPCSFM | SSIP FORCE MAIN IMPROVEMENTS | 5C | CPF13A | 3,800,000 | 0 | 0 | 0 | 3,800,000 | BTam |
| SSIP | CWWSIPFCDB | SSIP DRAINAGE BASIN PROJECTS | 5C | CPF13A | 10,640,000 | 0 | 0 | 0 | 10,640,000 | MWong/BTam |
| SSIP | CWWLID01 | SSIP LOW IMPACT DESIGN PROGRAM | 5C | CPF13A | 4,000,000 | 0 | 0 | 0 | 4,000,000 | RFGarcia |
| SSIP | CWWSIPFCWS | SSIP WATERSHED ASSESSMENT | 5C | CPF13A | 7,000,000 | 0 | 0 | 0 | 7,000,000 | KKubick/RFGarcia |
| ICIP | CENMSCICIRPS | WWE INTERIM CIP PUMP STATIONS | 5C | CPF13A | 4,000,000 | 0 | 0 | 0 | 4,000,000 | JDesai |
| ICIP | CENMSCICSR | WWE CIP SEWER/COLLECTION SYSTEM PROGRAM | 5C | CPF13A | 8,834,000 | 0 | 0 | 0 | 8,834,000 | BTam |
| ICIP | CENMSCICIRTF | WWE INTERIM CIP TREATMENT FACILITIES | 5C | CPF13A | 13,060,000 | 0 | 0 | 0 | 13,060,000 | JDesai |
| R&R | CWWRNRCSCA | WWE R&R COLLECTION SYSTEM COND ASSESSMENT | 5C | CPF13A | 3,000,000 | 0 | 0 | 0 | 3,000,000 | RCayabyab/JWong |
| R&R | CWWRNRCSSR | WWE R&R COLLECTION SYSTEM SEWER IMPRVMNTS | 5C | CPF13A | 40,323,000 | 0 | 0 | 0 | 40,323,000 | RCayabyab/JWong |
| R&R | CWWRNRCSSS | WWE R&R COLLECTION SYSTEM SPOT SEWER RPR | 5C | CPF13A | 8,000,000 | 0 | 0 | 0 | 8,000,000 | RCayabyab/JWong |
| R&R | CWWRNRTF00 | WWE R&R TREATMENT PLANT IMPROVEMENTS | 5C | CPF13A | 8,595,000 | 0 | 0 | 0 | 8,595,000 | BCarlomagno |
| OCIP | CWP110NF01 | WWE TI TREASURE ISLAND NEW WW TREATMENT FAC | 5C | CPF13A | 1,100,000 | 0 | 0 | 0 | 1,000,000 | MJurosek |
| | | | | | 243,908,000 | 0 | 0 | 0 | 243,808,000 | |

# INDIVIDUAL PROJECT SUMMARIES FOR FISCAL YEAR 2010-2011

**CENMSCIC23, Sunnydale Auxiliary Sewer Phase 1**
This project consists of the construction of a new auxiliary sewer tunnel between the Sunnydale drainage basin (Visitacion Valley District) and the Sunnydale Transport/Storage Facility located just southwest of Candlestick Park. The new sewer tunnel will increase the capacity of the sewer collection system within Visitacion Valley during heavy rain periods. The proposed scope of work includes installation of approximately 5,400 lf of 11.5 feet diameter sewer tunnel and 8 feet diameter microtunnel from Harney Way to Schwerin Street.

**CENMSCIC31, SEWPCP 620 & 680 Digester Compressor**
The objective of this project is to remove eight existing digester gas recirculation compressors units and furnishing and installing eight new digester gas recirculation rotary lobe blowers. The proposed project will improve the efficiency and performance of the digester sludge mixing and improvement in gas handling operation.

**CENMSCIC34, Folsom St Sewer Replacement**
The objective of the project is to replace/rehabilitate the existing sewers on Folsom Street from 12th Street to 13th Street and from 14th Street to 19th Street.

**CENMSCIC36, Facility Security / Emergency Response**
This project will identify the enterprise wide need of the security and emergency response measures. Based on vulnerability analysis, the projects in this category will include installing electric/electronic security devices, physical barrier (fencing), and similar facility access control features. The plan will also include the means and methods for responding to incidents in order to minimize disruption of service, protect employees and the public, and mitigate adverse environmental impacts.

**CENMSCIC37, WWE Facility Reliability Improvements (SEP Northside)**
The southeast plant northside reliability project will be done in multiple phases. Phase 1 will address the Bldg 040/041 corrosion and ventilation issues. Phase 2 will include, Bldg 260
WAS/RAS pumps and associated VFDs, and secondary treatment aging electrical and mechanical major equipments. The future work will address the Southeast Plant's hypochlorite, bisulfite disinfection system, and oxygen regeneration facility.

**CENMSCIC38, SEP Solid Handling**
This project will address the immediate need to address the digester roof corrosion and severe corrosion at Bldg 840/860 sludge dewatering facility. The major mechanical and electrical infrastructure has reached its expected life. The solids handling process is very critical component of the wastewater treatment and without upgrades the risk to the enterprise will be too high. These limited upgrades will make this facility run till new solids handling facility will be built.

**CENMSCIC39, OSP Solids Handling and Coating**
The scope of work consists of repairing external surface of 4 (four) egg shape digesters and converting biosolids to the Class A grade. This Class A press change will require installation of heat exchangers and other mechanical and electrical infrastructure. In addition, two new screw presses will be installed for improved biosolids dewatering.

**CENMSCIC40, Northshore and Mariposa Pump Station Improvements**
This project will replace the majority of suction, discharge, and force main lines with HDPE (high density polyethylene), with several sections of steel pipe rehabilitated in place at Northshore Pump Station. The scope of work also includes the new pump isolation and check valves and refurbished plug valves. The scope of work at the Mariposa Pump station includes installing new dry weather pumps. The flow meter will also be replaced to account for higher flow readings. The scope of work also includes installing a new gate valve, a new 12-inch knife gate valve, stem extension, and manual handwheel. It will also replace the existing Bubbler System as Operations reported that the existing bubbler system has issues with debris and sand. And finally, this project includes upgrading the electrical and controls System, the switchgear to 480V and installing variable frequency drives for the new dry weather pumps.

**CENMSCIC42, GHW Stabilization Emergency**
This project will provide storm damage response at the Great Highway, between Sloat and Skyline Boulevards. This project consists of multiple phases: 1) bluff toe stabilization and 2) roadway opening, bluff top stabilization and bluff face stabilization. A third phase was added to complete the remaining emergency bluff stabilization work at Ocean Beach to protect the Great Highway and Lake Merced Tunnel south of Sloat Blvd.

**CENMSCIC43, Richmond Drainage Improvement, Phase 2**
The objective of the project is to provide hydraulic improvements for the sewer system in the Richmond Drainage Watershed Basin. Currently, the sewer system in the area exhibits issues related to air, surcharging flow and sewer hydraulic inadequacies, which may lead to flooding. Based on a hydraulic study, Phase 1 work was completed to address immediate issues related to local-area flooding and was limited to available funding. Depending on funding availability, Phase 2 is targeted to follow-up on the work completed in Phase 1, such as rehabilitating the Old- Richmond Tunnel and to provide a more comprehensive hydraulic study of the Richmond Transport System, which would help define system needs and provide project definition and scope of work.

**CENMSCIC44, Cesar Chavez Sewer Improvements, Phase 2**
The objective of the project is to provide system-wide improvements to the Cesar Chavez sewer system east of Highway 101, which is part of the Islais Watershed Basin. The proposed project includes construction of a new sewer through a private property to connect two existing sewer boxes for improved hydraulic performance.

**CENMSCIC48, Channel Pump Station Improvements - Phase 3**
The project will replace aged emergency generator to meet new Bay Area Air Quality Management standards on diesel generator. The scope will include security improvements, replacement of corroded main lift pumps piping system, the enhancement of odor control features, and instrumentation and control work.

**CENMSCIC50, As Needed Sewer Replacement Contract 1**
The objective of the project is to repair existing sewer piping from manhole to manhole segments, on an as-needed basis, at various locations throughout San Francisco.

**CENMSCIC51, Spot Sewer Repair Contract #25**
The objective of the project is to repair existing sewer piping, on an as-needed basis, at various locations throughout San Francisco.

**CENMSCIC53, Downtown District Aging Sewer Replacement**
The objective of the project is to rehabilitate existing brick sewers throughout San Francisco's Downtown District.

**CENMSCIC55, Church St/Duboce Sewer Replacement**
The objective of the project is to replace/rehabilitate the existing sewers on Church Street from Duboce Avenue to Hermann Street and from Reservoir Street to Duboce Avenue and on Duboce Avenue from Church Street to Fillmore Street. This is a joint venture with Municipal Transportation Agency (MTA) Contract No. 1239. MTA is the lead agency and will manage this contract. This project is for the construction phase. The project cost is for the sewer work only.

**CENMSCIC56, Powell and Mason Sewer Replacement (part of Sewer Hydraulic Improvement)**
This project will replace structurally and hydraulically inadequate sewers on Mason Street, between Columbus Avenue and Jefferson Street, on Powell Street, between Francisco and North Point Streets, and on Bay Street, between Powell and Mason Streets.

**CENMSCIC57, Sewer Staff Facility Improvements**
The objective of the project is to consolidate WWE Collection System Division Administrative and Sewer Operations staff to a centralized location, and to maximize operational efficiency and functionality. The project will serve multiple functions: office spaces; a secure warehouse facility for equipment and material storage; an area for staging and operation of sewer cleaning vehicles; a vehicle maintenance bay; a fueling station; vehicle and equipment parking areas; and a hydraulic modeling facility to develop the physical modeling components related to current and future Sewer System Improvement Program (SSIP) projects.

**CENMSCIC58, Vactor Waste Staging Area**
The objective of the project is to consolidate WWE Collection System Division Administrative and Sewer Operations staff to a centralized location, and to maximize operational efficiency and functionality. The project will serve multiple functions: office spaces; a secure warehouse facility for equipment and material storage; an area for staging and operation of sewer cleaning vehicles; a vehicle maintenance bay; a fueling station; vehicle and equipment parking areas; and a hydraulic modeling facility to develop the physical modeling components related to current and future Sewer System Improvement Program (SSIP) projects.

**CENMSCIC59, Spot Sewer Repair Contract #26**
The objective of the project is to repair existing sewer piping, on an as-needed basis, at various locations throughout San Francisco. This project is the second of the two spot repair contracts that are issued each calendar year.

**CENMSCICSR (CENMSCIC54), Sunnydale Auxiliary Sewer Phase 2**
This project consists of the construction of new sewers within the Sunnydale drainage basin (Visitacion Valley District). The new Sunnydale tunnel in Project IC23 will increase the capacity of the sewer collection system within the drainage basin during heavy rain periods. The proposed scope of work on IC54 is itemized as follow: (1) Installation of approximately 580 lf of 4-foot diameter sewer in Rutland Avenue; and (2) Installation of approximately 675 lf of 5.5-foot diameter sewer in Schwerin Street. The new sewers will connect to both the new and existing Sunnydale tunnels at Sunnydale Avenue.

**CWWRNRTF - R&R Treatment Facilities**
The purpose of the Wastewater Enterprise (WWE) Renewal and Replacement (R&R) Program Treatment Plant Improvement projects is to maintain the capacity and reliable performance of the wastewater

treatment facilities owned/operated by the Wastewater Enterprise. This is a continuing annual program to extend the useful life of the WWE treatment assets. Treatment Facility Wastewater Enterprise Assets include: Transport Boxes, Discharge Structures, Pump Stations, Force Mains, Tunnels and Treatment Plants. The R&R Treatment Facilities projects are prioritized based upon regulatory compliance, condition assessments, Operation staff recommendations and Level Of Service goals. Planned WWE R&R Program Treatment Plant Improvement projects will address aging infrastructure at the wastewater enterprise treatment facility assets.

Planned WWE R&R Program Treatment Plant Improvement projects are prioritized based on risk to permit compliance, safety and urgency. The current list of projects includes: WWE Treatment Facility Repairs; Richmond hypochlorite pipe repair; Southeast Community Facility Hot Water Pipe Repairs; Southeast Building Roof repairs; Oceanside Bar Screen Repairs; Southeast Plant Fixed Gas Monitor Upgrades; Sunnydale Pump Station Adjustable Frequency Drive Upgrades; WWE Recycled Water Station Upgrades; Oceanside Plant Air Compressor Replacements; Griffith Pump Station Adjustable Frequency Drive Upgrades; Southeast Plant Building 062 Motor Starter Upgrades; and Oceanside Dry Polymer System Upgrades. Project priorities are revisited on a monthly basis.

**CWP11001 - Treasure Island – Existing Wastewater Facilities**
The objective of the project is to improve the reliability of the existing collection system and treatment facility at the Treasure Island. The major mechanical and electrical infrastructure at the Treasure Island treatment plant has reached its useful life and no longer reliable. The first construction contract will replace dewatering equipment, screw conveyor, digester gas lines, and other aged equipment. The lime stabilization of the sludge will allow the WWE to produce Class A biosolids. In the collection system, the pump stations number 23 through 27 will be replaced along with electrical and instrumentation. These much needed upgrades will provide improved monitoring and control of facilities.

**CWWRNRCS - R&R Collection Systems**
The purpose of the Wastewater Enterprise (WWE) Renewal and Replacement Program (R&R) Collection System Sewer Improvements project is maintain the existing functionality of the sewage collection system and address planned and emergency projects for repair and replacement of structurally inadequate sewers. This project in combination with the WWE Renewal and Replacement Program (R&R) Spot Sewer Repair replaces aging failed portions of the collection system. The portions of the collection system are identified utilizing an asset management approach, which factors in: physical condition, age, location, risk, public safety, paving schedule and other factors.

## INDIVIDUAL PROJECT SUMMARIES FOR FISCAL YEAR 2011-2012

**CENMSCICSR – Sewer Repair**
The Sewer/Collection System projects address the immediate/ongoing needs of SFPUC-WWE's sewer collection system. Projects include:

- Sunnydale Auxiliary Sewer Phase 2 - Local sewer improvements upstream of the new Sunnydale Auxiliary Tunnel within the Visitacion Valley community.
- Cesar Chavez Phase 2 – Sewer hydraulic improvements for the Cesar Chavez corridor to convey additional wastewater flows from the Mission District to the Islais Creek Transport/Storage sewer.
- Richmond Drainage Phase 2 - Provide improvements for existing sewer facilities in the Richmond/Seacliff district including the cleaning, repair & rehab of the Old Richmond Tunnel.

- Sewer Hydraulic Improvements - Increase the hydraulic capacity of hydraulically inadequate sewers Citywide. Some upcoming projects include the Bay/Powell Sewer Improvements Project.
- Aging Sewer Replacements - Provide Citywide sewer improvements for aging sewers and sewer repairs.
- Sewer Staff Facility Improvement - Modify trailer office space at 160 Napolean St. to accommodate increase in staff.
- Vactor Waste Staging Area - Construct a Vactor truck waste staging area to ensure compliance with new waste acceptance criteria for proper landfill disposal.

**CENMSCICTF - Treatment Facilities Improvements**
The Wastewater Enterprise Treatment Facility Improvements will: repair corrosion damage, improve ventilation, maximize odor control, upgrade electrical systems, and improve the reliability of facilities to provide reliable service and to comply with regulatory requirements. The proposed projects include:
- Southeast Water Pollution Control Plant (SEP) Solids Handling Improvements: Replacing the digester roof, biogas handling improvements, co-generation system upgrades, and address digested sludge dewatering facility corrosion repairs.
- Mechanical and Electrical Equipment Replacement: Replacing pumps, motors, motor drives, screens, gates, valves, actuators, motor control centers, switchgears, compressors, instrumentations, and controls.
- Security and Emergency Response Improvements: Provide access control (e.g. fencing, cameras) and emergency response improvements for Wastewater Enterprise facilities starting with the SEP, Griffith Pump Station and the North Point Facility.
- Oceanside Water Pollution Control Plant (OSP) Solids Handling and Coating Improvements: Replace the deteriorated digester coating and implement interim conversion to Class A Biosolids.
- Facilities Reliability Improvements: Reliability improvements include SEP Hypochlorite/Bisulfite Tank Farm Relocation, 12 KV Feeder Replacement, SEP & OSP Flares Modification, SEP Bldg. 040/041 Corrosion Repairs, SEP Bldg 012 HVAC/Odor Improvements, and SEP Bldg. 270 Oxygen Plant Rehab

**CWP11001 - Treasure Island – Capital Improvements**
At the existing Treasure Island treatment plant, there will be replacement of major and ancillary equipment which are in very poor condition and are close to failure. The equipment needing replacement includes the grit screw conveyor, digester gas lines, clarifier motor, chlorine contact tank, pumps, motors, slide gates, thermal shutoff valves, and the trickling rock media, etc. The replacement of this equipment and infrastructure will allow the plant to continue operating under its existing Regional Board NPDES permit until a new facility is built.

The pumps at Storm Lift Stations Numbers 23 through 27 will be replaced. Work also includes replacing the electrical and instrumentation panels for the pumps at the five lift stations. There are several sections of the collection system force main that are misaligned and collapsed, which require replacements. The project also provides for the replacement of pumps and upgrading the electrical and control panels at the various pump stations along the collection system.

**CWWBAE00 – Biofuel Alternative Energy Program**
The Biofuel/Alternative Energy Program will determine if it is feasible and cost-effective for the SFPUC to generate bioenergy (e.g. biofuel or cogenerated power) as a byproduct of processing the fats, oils, and grease (FOG) and/or food waste collected throughout the City. Feasibility will be determined through pilot studies and analysis that will evaluate whether adoption of biofuel energy programs into the SFPUC's wastewater infrastructure (collection system and/or treatment processes) would reliably and cost-effectively enhance performance and sustainability.
Some projects included in the program are:

- Development of a business plan to determine the cost effectiveness and potential benefits from new sources of alternative energy
- Evaluation of the market and assessment of the impacts to Wastewater Enterprise
- Continuation of the pilot project evaluating the conversion of brown grease into biodiesel (this effort is partially supported by a California Energy Commission grant)
- Pilot studies evaluating collection and treatment of food waste and Cost-Benefit Analysis regarding co-digestion versus separate digestion in a dedicated off-site facility
- Participation in the Bay Area Regional Biosolids to Energy Project
- Local FOG collection and handling projects
- Solutions to technical and cost issues that would be proposed so management policy decisions can be made as part of the long-term treatment strategy

**CWWLID – Low Impact Design Project**

Through the Low Impact Design (LID) Program, projects and polices will be developed for storing, or diverting, stormwater for beneficial use prior to being directed into the sewer system. The LID Program will enhance local neighborhood aesthetics, reduce localized flooding, and improve the operating efficiency of San Francisco's combined sewer system. The LID Program will include the watershed planning efforts for various drainage basins (evaluating stormwater issues and opportunities, and possible low impact design opportunities).

The funding request includes:

FY2012: $1M for Better Streets Plan and $500K for Watershed Analysis;

FY2013: $2M for Better Streets Plan and $2M for Watershed Analysis and Demonstration Projects.

Future years' funding will be expanded to include Downspout Disconnect Incentives and the execution (planning, environmental review, design, and construction) of stand-alone LID projects.

**CWWRNRCS - R&R Collection Systems**

The purpose of the Wastewater Enterprise (WWE) Renewal and Replacement Program (R&R) Collection System Sewer Improvements project is maintain the existing functionality of the sewage collection system and address planned and emergency projects for repair and replacement of structurally inadequate sewers. This project in combination with the WWE Renewal and Replacement Program (R&R) Spot Sewer Repair replaces aging failed portions of the collection system. The portions of the collection system are identified utilizing an asset management approach, which factors in: physical condition, age, location, risk, public safety, paving schedule and other factors.

**CWWRNROI01 – Outfall Inspection/Receiving Water**

SFPUC operates and maintains (one) ocean and (multiple) Bay outfall structures as part of the wastewater treatment process. Up to 110 million gallons per day (MGD) of treated effluent from the Southeast Plant is discharged into the San Francisco Bay, 810 feet from Pier 80 through the Southeast Bay Outfall. Similarly, up to 175MGD of treated effluent from the Oceanside Plant is discharged into the Pacific Ocean, about four miles offshore through the Southwest Ocean Outfall. Lastly, 150MGD of effluent from the North Point Wet-Weather Facility is discharged into the San Francisco Bay through the North Point Outfall located between Piers 33 and 35. This project provides for extensive field inspections and Condition Assessments of the existing outfalls. Minor repair of these outfalls is also included to negate any possible loss of operating capacity.

Receiving water studies will also be conducted as a part of this project to evaluate the impacts of the treated wastewater effluent to the Pacific Ocean and Bay environments, and whether improvements should be made in the future. A dilution study is required as outlined in the most recent Regional Water Quality Control Board permit for the Oceanside Plant.

**CWWSIPCT - Central Bayside System Improvements**
This project will provide redundancy andseismic reliability for WWE's Bayside Collection System operations. Currently, the Channel Pump Station and an existing 66-inch Channel Force Main are the only conveyance infrastructure available to transport wastewater from the northeast portion of the City to the Southeast Wastewater Pollution Control Plant (SEP) for treatment. However, the Channel Force Main is seismically vulnerable and has failed three times since its construction in 1981, including during the 1989 Loma Prieta Earthquake. Future potential failure of this force main would be catastrophic and detrimental to WWE's ability to reliably collect and treat wastewater/stormwater from the Bayside. The proposed project will replace the Channel Street Pump Station and the Channel Force Main with gravity conveyance structure for dry-weather and wet- weather flows. The conceptual design includes an approximately twenty-three foot inside diameter tunnel with a direct connection to the SEP via a deep lift station near the plant's headworks adjacent to Evans Avenue. In addition to providing seismic reliability and operational redundancy to the existing Bayside Collection System, the current design includes additional stormwater storage capacity and improved flow conveyance between Channel Basin and SEP. This additional capacity and improved conveyance will aid in minimizing existing localized flooding within the Channel Basin (i.e. South of Market areas). Consolidation/modification of existing satellite pump stations along the alignment will be considered and addressed during the planning phase. A thorough urban watershed analysis to determine the volume of flows that need to be managed and the corresponding combination of green infrastructures/grey infrastructure stormwater control solutions will also be conducted. Appropriate green infrastructure (e.g. Low Impact Design) elements will be incorporated into the final project.

**CWWSIPDP - Biosolids Digester Facility**
The proposed Biosolids Digester Facility project includes the planning, design, and construction of a new digester and solids handling facility which would replace the existing aged failing facility at the Southeast Water Pollution control Plant (SEP). SEP is located adjacent to residents and employs 1940's technology for treatment, structural design and odor control. The new facility is proposed to be located in the southeast area of San Francisco. It will include state-of- the-art treatment processes producing Class A Biosolids that can be reused for beneficial purposes. This project includes replacement of the existing, outdated digester and solids handling facility at SEP. The new facility will minimize the operation and maintenance demands, provide control to meet the levels of service, odor and visual impacts of operations on the surrounding community, and provide seismic and structural upgrades.

**CWWSIPNC – Northshore to Channel Force Main**
The project location is in downtown San Francisco with parts of work being in the Port of San Francisco jurisdiction. The contract work consists of installing new valves and valve-vaults in the sidewalk of the Embarcadero Street, between Broadway and Washington Streets; installing a new force main sewer inside an existing sewer box near Washington Street; installing a new force main sewer on Drumm Street from Jackson Street to California Street, on Spear Street from Market Street to Howard Street, and on Howard Street from Spear to Steuart Street; and installing air-vents and other appurtenances along the new force main alignment.

Although a contract was issued in 2010, SFPUC had to terminate the contract due to major utility conflicts because certain utilities did not provide correct information per the Franchise Agreement. SFPUC has notified the proper utility for them to relocate their facilities and/or work with our engineering group for relocation and support or work-around. Currently, a new contract is expected to be issued in 2012 once the utilities relocate their facilities.

**CWWSIPPL – SSIP Planning Project**

The Sewer System Improvement Program (SSIP) projects are focused on achieving the SFPUC's endorsed Goals and Levels of Service for the wastewater treatment and collection system. The SSIP is a series of capital improvement projects focused on improving the wastewater system to meet the present and future needs of the City and Treasure Island. Projects will increase the level of ensured reliability and future sustainability consistent with the SFPUC's endorsed Goals and Levels of Service for the wastewater system. The SSIP implementation will require: Condition Assessment (facility inspections), project definition and prioritization, public outreach and education, and general program management. The initial focus will be on scope optimization and validation; and the development of programmatic schedules, cost estimates, and spending projections for the SSIP.

**CWWSIPPS – Bayside & Westside Pump Stations**

Wastewater Enterprise (WWE) is responsible for the operation of 27 Pump Stations (PS) and their associated force mains. The reliability of the pump stations is critical for compliance with the SFPUC's Regional Water Quality Control Board's National Pollutant Discharge Elimination System (NPDES) permit. In addition to the Sewer System Improvement Program's projects, which will start the planning phase in 2013, the following funding is needed for specific projects below:

- Westside Pump Station: The 35-year old Westside PS is one of the most critical facilities in the City's wastewater collection system. There have been on-going corrosion issues with the piping network associated with the lift pumps and this project will replace/rehabilitate all suction and discharge piping.
- Griffith Pump Station: The 21-year old Griffith PS has been experiencing severe corrosion of the piping network associated with dry-weather and wet-weather pumps. This project will replace/rehabilitate all suction and discharge piping.
- Minor Pump Stations: Based on the results of Condition Assessments of the City's minor Pump Stations, WWE will prioritize and implement the repair/rehabilitation of the various Pump Stations.

**CWWSIPRB – Richmond Basin Improvements**

The project is for overall system improvement in the Richmond Drainage Basin. Currently, the collection system in the Richmond Drainage area includes the Richmond Transport Tunnel, Mile Rock Tunnel (not in use), outfalls and pump stations near Baker's Beach area, and many miles of sewer pipes in various sizes. These facilities have aged and some are at the end of its useful lives. Due to the changing uses and recent development, a comprehensive review of how the existing sewer & collection system is necessary to ensure that the system will continue to provide the proper level-of-service to the customers in this drainage basin.

**CWWSIPUW - Urban Watershed Assessment Project**

Many of the SSIP's proposed projects are focused on improvements to stormwater management in San Francisco. The SSIP Urban Watershed Assessment and Planning project will evaluate alternatives that balance the use of grey (pipelines) versus green infrastructure (low impact design) for solutions to watershed stormwater management improvements. The SSIP will utilize an integrated watershed management approach to investigate the health of the City's watershed and identify potential opportunities for stormwater capture, conveyance, detention and possible reuse to address issues of flooding. Project implementation will require the hydraulic analysis of each of the eight drainage basins and will include: identification of various solutions to each basin's unique set of flooding challenges; evaluation of the social, economic and environmental values of alternatives that meet the level of service with a triple bottom line tool and the optimization and prioritization of projects for each basin. The work will address life cycle costs and detailed maintenance requirements.

## INDIVIDUAL PROJECT SUMMARIES FOR FISCAL YEAR 2012-2013

**CWWSIP-PRPC - SSIP-Program Wide Program Management**
The Sewer System Improvement Program (SSIP) projects are focused on achieving the SFPUC's endorsed Goals and Levels of Service for the wastewater treatment and collection system. The SSIP is a series of capital improvement projects focused on improving the wastewater system to meet the present and future needs of the City. Projects will increase the level of ensured reliability and future sustainability consistent with the SFPUC's endorsed Goals and Levels of Service (LOS) for the wastewater system. The SSIP implementation will require: Condition Assessment (facility inspections), project definition and prioritization, public outreach and education, analysis of the impacts of climate change, sustainability evaluation, and general program management (program controls, change control, constructability). The initial focus will be on scope optimization and validation; and the development of programmatic schedules, cost estimates, rate and spending projections for the SSIP.

**CWWBAE - SSIP-Biofuels/Alternative Energy Studies**
The Biofuel/Alternative Energy Program will determine if it is feasible and cost-effective for the Wastewater Enterprise (WWE) to generate bioenergy as a byproduct of processing the fats, oils, and grease (FOG) and/or food waste collected throughout the City. Feasibility will be determined through pilot studies and analysis that will evaluate whether adoption of biofuel energy programs into the SFPUC's wastewater infrastructure (collection system and/or treatment processes) would reliably and cost effectively enhance system performance and sustainability. Some projects included in the program are:

- Development of a business plan to determine the cost effectiveness and potential benefits from new sources of alternative energy.
- Evaluation of the market and assessment of the impacts to Wastewater Enterprise.
- Continuation of the pilot project at the Oceanside Plant, evaluating the conversion of brown grease into biodiesel, as a part of a California Energy Commission grant.
- Pilot studies evaluating collection and treatment of food waste regarding codigestion versus separate digestion in an off-site facility.
- Local FOG collection and handling projects.

**CWWSIP-DP - SSIP-Biosolids Digester**
The Biosolids Digester Facility project is a critical part of the Sewer System Improvement Program (SSIP). This project would provide a new digester and solids handling facility replacing the existing aged and failing facility at the Southeast Plant (SEP). The new facility would include state-of-the-art treatment processes, producing Class A (EPA 40 CFR 503) biosolids that can be reused for beneficial purposes. Biosolids treatment processes would include solids thickening, anaerobic digestion, gas handling, energy generation/reuse, dewatering, odor control and side stream treatment. Possible siting alternatives for the new facility are being evaluated either on-site at or near the existing digester area at SEP with the addition of available adjacent property or off-site. SEP is SFPUC's largest wastewater facility treating flows from the bayside of the City, which equates to almost 80% of the City's total flow. SEP has a maximum treatment capacity of 250 million gallons per day (MGD). The current daily average dry-weather flow is 63 MGD. The biosolids digester facility is very intricate to the SEP plant operation, so the future needs and improvements for the entire plant, both liquid and solids processes need to be identified and considered concurrently, as a part of the planning and alternative analysis phases for the Biosolids Digester Facility Project. This comprehensive evaluation will ensure completeness, efficiency, response to the concerns of the neighborhood, and continued regulatory compliance in the future. Similarly, the environmental review will focus on the Biosolids Digester Facility and the Southeast Plant, as a whole.

**CWWSIP-TPTS - SSIP- Transport /Storage and Combined Sewer Discharge Structures**

The Sewer System Improvement Program (SSIP) includes improvements to the near shore combined sewer transport storage (T/S) and combined sewer discharge (CSD) structures located around the perimeter of the city. This project will address issues with aging infrastructure, climate change adaptation, reliability, odor control and flood control. The T/S structures (also referred to as T/S boxes) are critical to wastewater operations during dry and wet weather, because they convey flow year round. There are over seventeen miles of T/S boxes in the City, some of which have been in service over forty years. These T/S boxes provide primary wet weather treatment for the combined flows and are a critical part of Wastewater Enterprise's Regional Water Quality Control Board operating permit. The T/S structures and tunnels have a combined capacity over one hundred and sixty-six (166) million gallons. Located around the perimeter of San Francisco, there are twenty nine combined sewer discharge (CSD) points along the bayside, and seven CSD locations along the west side of the city. CSD structures provide a relief mechanism during wet weather events when capacities at the wastewater treatment plants, wet-weather facilities and T/S boxes are exceeded.

This Project will address structural and operational improvements to CSD and T/S structures. Projects include backflow prevention improvements to prevent backflow of bay water through the CSD structures into the collection system. Currently bay water enters the system during very high tides; this is expected to occur more frequently due to sea level rise and increasing storm surge. The salt water (chlorides) is extremely detrimental to the secondary treatment process at the Southeast Plant. The project will also address structural improvement and corrosion improvements (coating and concrete repair) to the City's T/S structures. The T/S boxes are built in a very corrosive area (along the shoreline) and experience corrosion due to the build up of sewer gases.

**CWWSIP-SEPL - SSIP-Southeast Plant**

This Sewer System Improvement Program (SSIP) project will include major improvements to the Southeast Water Pollution Control Plant (SEP) and associated facilities. SEP is the SFPUC's largest wastewater facility treating almost 80% of the City's dry and wet weather flows. SEP has a maximum treatment capacity of 250 million gallons per day (MGD) with a daily average dry-weather flow of 63 MGD. Improvements are needed to ensure that the SEP facilities maintain permit compliance, operate reliably, and meet the
Commission endorsed levels of service (LOS). This project will address the liquid treatment portion of the improvements at SEP. Large scale improvements to address aging infrastructure, outdated technology, energy efficiency, neighborhood impacts, and collection system operations will include:

- Containment and treatment of odors, such that no odors are present past the facility's fence line;
- Architectural and landscape, structural, mechanical, electrical, instrumentation, corrosion and seismic upgrades;
- Inclusion of systems that promote energy recovery and energy efficiency;
- Refurbishment or expansion of influent pump station, headworks, primary treatment, oxygen generation system, secondary clarifiers, and effluent pump station;
- New secondary effluent disinfection; and
- New chemical feed facilities.

As a part of the comprehensive planning phase of the Biosolids Digester Project (CWWSIPDP), future needs and major improvements for both liquid and solid processes at the plant will be confirmed. The scope of the SSIP SEP project(s) will be better defined once a needs/conditions assessment is conducted. It is also anticipated that immediate improvements will be needed to sustain the facility and ensure reliable operation, safety and regulatory compliance.

**CWWSIP-TPNP- SSIP-North Point Facility and Outfalls**
This Sewer System Improvement Program (SSIP) project will address major improvements to the North Point Facility (NPF), North Shore Pump Station, and associated outfalls, which began operation in 1951. The NPF is one of the Wastewater Enterprise's oldest facilities and is the only wet weather treatment plant in San Francisco. During wet weather, NPF provides primary treatment to flows from the northeast drainage areas of the City. It is a key component of the Wastewater Enterprise's Regional Water Quality Control Board (RWQCB) permitted wet weather and combined sewer discharge system operation. NPF has a primary treatment capacity of 150 million gallons per day (MGD). Treated flows are discharged through the North Point Outfalls located at Pier 33 and 35. Large scale improvements to the NPF and North Point Outfall will address aging infrastructure, odor control, seismic deficiencies, outdated equipment and technology and process performance.

North Shore Pump Station is a dry weather and wet weather pump station that pumps dry weather flow for the northeastern sector of the City to the Channel Transport Storage structure, and wet weather flows to the NPF. The pump station requires seismic, structural, structural and instrumentations upgrades.
The scope/priority of the SSIP NPF, North Shore Pump Station and North Shore Outfall improvement project(s) will be better defined once a needs/conditions assessment is conducted which is scheduled to begin in 2012. It is anticipated that immediate improvements will be needed in the near term to sustain the facility and ensure reliable operation, safety and regulatory compliance, as the overall system operation is evaluated, and the more comprehensive SSIP NPF project(s) is planned, designed and constructed.

**CWWSIP-TPOS - SSIP-Oceanside Plant**
This SSIP project will include major improvements to the Oceanside Water Pollution Control Plant (OSP), Westside Pump Station and Force Main. OSP treats wastewater/stormwater flows from the westside of the City. OSP has a wet weather treatment capacity of 65 million gallons per day (MGD), and dry weather capacity of 17 MGD. Improvements are needed to ensure that the OSP-related facilities maintain permit compliance, operate reliably, and meet the Commission endorsed levels of service (LOS). The scope of the SSIP OSP projects will be better defined once a needs/condition assessment is conducted, which is scheduled to begin in 2012. It is anticipated that immediate improvements will be needed to sustain the facility and ensure reliable operation, safety and regulatory compliance, as the larger SSIP OSP projects are planned, designed and constructed. The areas of large scale improvements that have been identified include:

- Containment and treatment of odors, such that no odors are present past the facility fence line;
- Architectural and landscape;
- Structural, mechanical, corrosion, instrumentation and seismic upgrades;
- Security, safety and access;
- Improvement of the pretreatment/grit removal processes;
- Oxygen generation upgrades;
- Improvements to the existing digester system to reliably produce Class A Biosolids; and,
- Energy recovery system including a new gas handling processes and waste gas burners.

**CWWSIPCT01- SSIP-Central Bayside System Improvements Project**
The proposed Central Bayside System Improvements Project (CBSIP) is one of the major collection system focused projects included in the Sewer System Improvement Program (SSIP). The CBSIP will provide collection system enhancement to the Channel Drainage Basin, including needed redundancy for the existing 66-inch Channel Force Main, hydraulic improvements to sewers/pump stations, and

improvements to stormwater management through elements of both grey and green infrastructure. An analysis will be conducted to quantify the current and future anticipated stormwater flows and run-off that must be managed. Major components of the project consist of a tunnel to transport, via gravity, dry and wet-weather flows from the Channel and North Shore Drainage Basins to the Southeast Water Pollution Control Plant (SEP) and a large all-weather pump station to lift the flows into the SEP. The planning and pre-design of CBSIP will be conducted concurrently with the environmental review process. Project funding of $24M was previously appropriated for the initiation of specialized consultant planning services. In 2012, the consultant procurement selection process will be completed, internal project planning has started, and the environmental review effort will begin. The requested additional funding in FY13 and FY14 will provide for environmental review, completion of planning, and the pre-design initiation efforts.

**CCWSIP-CSSR - Collection System - Sewer Improvements**

The Collection System Sewer System Improvement Program (SSIP) projects include improvements as follow:

- Replacement of existing sewers to increase hydraulic capacity, reduce localized flooding and to provide system-wide improvements;
- Rehabilitation of Major Trunk Sewers, Brick Sewers and Tunnels to increase their useful life;
- Odor Control Measures in the system;
- Relocation of existing easement sewers to the public right-of-way; and
- Replacement or installation of new facilities in coordination with other City departments' capital projects, such as SFMTA's bus rapid transit projects (e.g. Van Ness Ave.) and SFDPW's streetscape projects (Market Street).

**CCWSIP-CSPS - SSIP-Pump Station Improvements**

The Wastewater Enterprise (WWE) is responsible for the operation of 27 pump stations located throughout the City. These pump stations are critical components of the collection system because they convey wastewater flows to the treatment facilities where gravity means are not feasible. The Sewer System Improvement Program (SSIP) mandate for the pump stations is to minimize their maintenance requirements, improve energy efficiency, reduce odor and visual impacts, and enhance overall reliability consistent with the LOS goals. Funding request for FY13 and 14 are for condition assessments of the pump stations and initiation of planning, environmental review, and design efforts. WWE will prioritize and implement the repair/rehabilitation of the various Pump Stations.

The anticipated projects are:

- Westside Pump Station (WPS) Improvements: The 35-year old WPS is one of the most critical facilities in the City's wastewater collection system. The pump station is an all-weather facility that pumps dry weather flow to Oceanside Treatment plant, and wet weather flows to the treatment plant and the decant facilities. The improvements will address reliability of dry-weather and wet-weather pumps, capacity, energy efficiency, structural, electrical, and controls. The need for rehabilitation/replacement of the manifold and force main piping will be evaluated.
- Griffith Pump Station (GPS): The GPS has been in operation for over 20 years. GPS is an all-weather pump station that pumps flows from the lower Yosemite and Sunnydale areas to the Islais Creek Drainage basin. The improvements will address: reliability of dry-weather and wet-weather pumps, capacity, energy efficiency, structural, electrical, and controls. The need for rehabilitation/replacement of the manifold and force main piping will be evaluated.
- Minor Pump Stations: Based on the results of Condition Assessments of the City's minor Pump Stations.

**CCWSIP-CSFM - SSIP-Force Main Improvements**
The Wastewater Enterprise (WWE) is responsible for the operation and maintenance of 27 pump stations and their associated force mains across the entire City. These pump stations and force mains are critical components of the collection system because they convey wastewater flows to the treatment facilities where gravity means are not feasible. The current wastewater system lacks any force main redundancy. In some cases force mains are past their useful life and require replacement. The SSIP goal for the force mains is to minimize their maintenance requirements, improve energy efficiency, and enhance overall reliability consistent with the Level-of-Service goals. The funding request for fiscal year 13 and 14 (FY13 and FY14) includes condition assessments of force mains and the rehabilitation of the existing North Shore Force Main.

**CWWSIP-FCDB - SSIP-Drainage Basin Projects**
Many of the Sewer System Improvement Program's (SSIP) projects are focused on improvements to stormwater management in San Francisco. The SSIP will utilize an integrated drainage basin management approach to investigate the health of each of the City's drainage basins (watersheds) and identify potential opportunities for stormwater capture and reuse to address issues of flooding. These projects will provide basin-wide improvements for watersheds identified in the SSIP. A balance between grey and green infrastructure (e.g. low impact design) will be achieved. The drainage basins to be addressed include: Richmond, Lake Merced, Sunset, North Shore, Islais, Yosemite and Sunnydale Drainage Basins. There are also immediate needs already identified through previous hydraulic studies or from the public input, which will be validated through a drainage-basin-wide analysis to determine if some work can be done immediately
that would not impact future system-changes to the drainage basin improvements. Due to the unique and
immediate needs of the Channel Drainage Basin, this basin will be separately addressed under the Central
Bayside System Improvement Project (CWWSIP-CT).

**CWWLID - SSIP-Low Impact Design Program**
Through the Low Impact Design (LID) Program, projects and policies will be developed for storing, or diverting stormwater for beneficial use prior to being directed into the sewer system. The LID Program potential benefits include: enhancement of local neighborhood aesthetics, reduced localized flooding, and improvement to the operating efficiency of San Francisco's combined sewer system by reducing the volume and rate that stormwater enters the system. The LID Program will closely tie to the watershed planning efforts for the City's eight drainage basins (evaluating stormwater issues and opportunities, basin characteristics, and possible grey and green solutions). The funding requests in FY 2013 and FY 2014 are for LID improvements in coordination with Better Streets Plan projects (e.g. Valencia Street Streetscape) and annual R&R sewer projects. Future years' funding will be expanded to include the execution (planning, environmental review, design, and construction) of stand-alone LID projects that are owned, operated and controlled by the SFPUC.

**CWWSIP-FCWS SSIP-Watershed Assessment -**
Many of the Sewer System Improvement Program's (SSIP) projects are focused on improvements to stormwater management in San Francisco. The SSIP Urban Watershed Assessment and Planning project will evaluate alternatives that balance the use of grey versus green infrastructure for collection system improvements. The SSIP will utilize an integrated watershed management approach to investigate the health of the City's watershed. In addition to evaluating grey solutions, this approach will identify

potential opportunities for stormwater capture and reuse to address issues of flooding. The Watershed Assessment process will evaluate existing land use, soil type, topography and infiltration rates to inform the alternative analysis process so that an appropriate mix of grey and green infrastructure is proposed. The work will address life cycle costs and detailed maintenance requirements. The Watershed Assessment effort will result in the identification of project alternatives for each of the eight drainage basins. Project implementation will require the hydraulic analysis of each drainage basin and will include: identification of various solutions to each basin's unique set of flooding challenges; evaluation of the alternatives that meet the endorsed Levels of Service with a triple bottom line tool that addresses the social, environmental, and economic implications; and the optimization and prioritization of projects for each basin.

**CENMSC-ICIRPS - WWE-Interim CIP-Pump Stations**

The Wastewater Enterprise (WWE) Interim CIP Pump Station project addresses the short-term capital improvement needs for the 27 WWE Pump Stations (PS) and their associated force mains. The reliability of the pump stations is critical for compliance with the SFPUC's Regional Water Quality Control Board's National Pollutant Discharge Elimination System NPDES) permit. In the future these will be addressed by the Sewer System Improvement Program's (SSIP) projects, which will start the planning phase in 2013. WWE will prioritize and implement the repair/rehabilitation of the various Pump Stations.
The following funding is needed for some of the specific projects below:

- Westside Pump Station (PS): The 35-year old Westside PS is one of the most critical facilities in the City's wastewater collection system. There have been on-going corrosion issues with the piping network associated with the lift pumps and this project will replace/rehabilitate all suction and discharge piping.
- Griffith Pump Station: The 21-year old Griffith PS has been experiencing severe corrosion of the piping network associated with dry-weather and wet-weather pumps. This project will replace/rehabilitate all suction and discharge piping.
- Minor Pump Stations: Based on the results of Condition Assessments of the City's minor Pump Stations.

**CENMSC-ICSR - WWE-CIP-Sewer/Collection System Program**

The Sewer/Collection System projects are part of the Capital Improvement Program (CIP). This ongoing program addresses the immediate needs of SFPUC-WWE's sewer collection system prior to the full implementation of the SSIP. Projects include:

- Richmond Drainage - Continue the rehabilitation of the Old Richmond Tunnel.
- Mason/Powell Street Sewer Improvement - Provide hydraulic improvements to the collection system on Mason and Powell Streets.
- Sewer Staff Facility Improvement - Consolidate Collection System Division Administration and Operations Staff to a centralized facility.

**CENMSC-ICIRTF -WWE-Interim CIP-Treatment Facilities**

The Wastewater Enterprise (WWE) Interim Capital Improvement Program (CIP) Treatment Facility Improvements will: repair corrosion damage, improve ventilation, maximize odor control, upgrade electrical systems, and improve the reliability of facilities to provide reliable service and to comply with regulatory requirements. This is the last year funds are requested; as this program is near completion and any future capital work will be addressed through the Sewer System Improvement Program (SSIP). The proposed projects to be completed include:

- Southeast Water Pollution Control Plant (SEP) Solids Handling Improvements: replace existing digester roofs, improve biogas handling system, upgrade co-generation system upgrades, and repair digested sludge dewatering facility corrosion.

- Mechanical and Electrical Equipment Replacement: replace pumps, motors, motor drives, screens, gates, valves, actuators, motor control centers, switchgears, compressors, instrumentations, and controls.
- Security and Emergency Response Improvements: provide access control (e.g. fencing, cameras) and emergency response improvements for Wastewater Enterprise facilities starting with the SEP, Griffith Pump Station and the North Point Facility.
- Oceanside Water Pollution Control Plant (OSP) Solids Handling and Coating Improvements: replace the deteriorated digester coating and implement interim conversion to Class A Biosolids.
- Facilities Reliability Improvements: Reliability improvements include SEP Hypochlorite/Bisulfate Tank Farm Relocation, 12 KV Feeder Replacement, SEP & OSP Flare Modification, SEP secondary sludge conveyance upgrades, HVAC/Odor Improvements, and SEP Oxygen Plant Replacement.

**CWWRNR-CSCA WWE-R&R-Collection System - Condition Assessment**
The sewer collection program includes Sewer System Improvement Program (SSIP), Capital Improvement Program (CIP), and Renewal and Replacement Program (R&R); together, the respective programs address long-term planning and immediate/ongoing needs to support the sewer collection system. The R&R Program Collection System Condition Assessment projects consist of cleaning and inspection of large diameter sewers, transport/storage boxes and collection system discharge/overflow structures. The results of the inspection program will inform the R&R Spot Repair and Collection System Sewer Improvements Programs, as well as the SSIP. Projects consist of cleaning/inspection of large diameter sewers, transport/storage boxes and outfall structures throughout San Francisco.

**CWWRNR-CSSR - WWE-R&R-Collection System - Sewer Improvements**
The purpose of the WWE Renewal and Replacement Program (R&R) Collection System Sewer Improvements project is maintain the existing functionality of the sewage collection system and address planned and emergency projects for repair and replacement of structurally inadequate sewers. This project in combination with the WWE Renewal and Replacement Program (R&R) Spot Sewer Repair replaces aging failed portions of the sewer collection system.

The R&R Collection System Sewer Improvements projects are identified and prioritized utilizing an asset management based approach, which factors in physical condition, age, location, risk factors tied to the consequences and likelihood of failures, public safety, paving schedule and various other factors. Projects in FY 12/13 and 13/14 will consist of replacing approximately 12-13 miles of structurally inadequate main sewers throughout San Francisco. In FY 14/15, the goal is to replace approximately 15 miles of structurally inadequate high risk main sewers and maintain this replacement level for the next 10 years which will enable San Francisco to meet the targeted levels of service goals. After 10 years of 15 miles per year, the annual replacement rate is expected to level off at approximately 8.5 miles per year.

**CWWRNR-CSSS - WWE-R&R-Collection System - Spot Sewer Repair**
The purpose of the WWE Renewal and Replacement Program (R&R) Spot Sewer Repair Project is to address short segments of failed sewers due to age and condition. The R&R Collection System Spot Sewer Repair Project collectively with the Collection System R&R Projects, and the Sewer System Improvement Program Collection System Projects addresses the long-term planning and immediate/ongoing needs to support the sewer collection system.

The R&R Collection System Spot Sewer Repair Project will address collapse sections of pipe, voids and

holes and other deficiencies. Deficiencies are identified based on visible failures reported by the public and the results of the sewer condition assessment program by means of CCTV. The R&R Program Collection System Spot Sewer Repair projects address failures based on criticality. Currently there are approximately 2,300 outstanding sewer spot repair work orders. The rate of discovery is currently twice the rate of repair. Projects in FY 12/13 will repair approximately 300 individual spot sewer locations with an increase in FY 13/14 to repair approximately 700 individual spot sewer locations to meet the targeted levels of service goals. It is anticipated that this base rate of spot repair will continue for the next several years and would ultimately decrease as the overall R&R program continues to be implemented. The end result of this increased investment in spot repairs will be an overall decrease in the number of emergency repairs occurring due to sewer mainline failures.

**CWWRNR-TF - WWE-R&R-Treatment Plant Improvements**

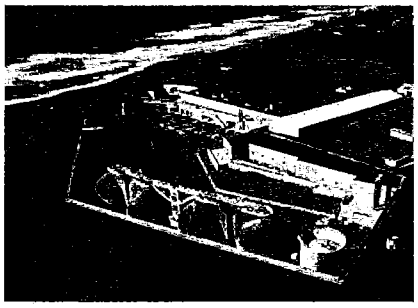
The purpose of the Wastewater Enterprise (WWE) Repair and Replacement (R&R) Program Treatment Plant Improvement projects is to maintain the capacity and reliable performance of the wastewater treatment facilities owned/operated by the Wastewater Enterprise. This is a continuing annual program to extend the useful life of the WWE treatment assets. Treatment Facility Wastewater Enterprise Assets include: Transport Boxes, Discharge Structures, Pump Stations, Force Mains, Tunnels and Treatment Plants. The R&R Treatment Facilities projects are prioritized based upon regulatory compliance, condition assessments, Operation staff recommendations and Level Of Service goals. Planned WWE R&R Program Treatment Plant Improvement projects will address aging infrastructure at the wastewater enterprise treatment facility assets.

Planned WWE R&R Program Treatment Plant Improvement projects are prioritized based on risk to permit compliance, safety and urgency. The current list of projects includes: WWE Treatment Facility Repairs: Richmond hypochlorite pipe repair; Southeast Community Facility Hot Water Pipe Repairs; Southeast Building Roof repairs; Oceanside Bar Screen Repairs; Southeast Plant Fixed Gas Monitor Upgrades; Sunnydale Pump Station Adjustable Frequency Drive Upgrades; WWE Recycled Water Station Upgrades; Oceanside Plant Air Compressor Replacements; Griffith Pump Station Adjustable Frequency Drive Upgrades; Southeast Plant Building 062 Motor Starter Upgrades; and Oceanside Dry Polymer System Upgrades. Project priorities are revisited on a monthly basis.

**CWP110-NF WWE-TI-Treasure Island - New Wastewater Treatment Facility**

The aged, unreliable wastewater treatment facilities at Treasure Island require replacement. A two million gallon per day (MGD) tertiary wastewater treatment facility has been proposed for the Treasure Island/Yerba Buena Island service area to replace the decrepit existing facility. The new treatment facility would include influent screening, a combined primary/secondary treatment process (such as membrane bioreactors), anaerobic sludge digestion, sludge dewatering and truck load-out, disinfection, odor control and tertiary treatment enabling reuse on the island. The planning and design of this new wastewater treatment facility will begin once City ownership is established, which is anticipated by Fiscal Year 2012-2013. Construction of the wastewater treatment plant will be coordinated with the development of Treasure Island/Yerba Buena Island.

San Francisco
Water Power Sewer
Services of the San Francisco Public Utilities Commission



# Wastewater Enterprise Financial Projections

April 4, 2012

BARTLE WELLS ASSOCIATES
INDEPENDENT PUBLIC FINANCE ADVISORS

## Table 1 - SFPUC Wastewater Enterprise Cash Flow Projections

| | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|---|
| **ASSUMPTIONS** | Adopted | Adopted | Adopted | Projected | Projected |
| Rate Increases | 5.00% | 5.0% | 5.0% | 0.0% | 4.0% |
| Change in Wastewater Sales | -3.60% | -2.0% | 0.0% | 0.0% | 0.0% |
| Interest Earnings Rate | | 2.0% | 2.0% | 2.0% | 2.0% |
| Salary & Benefit Cost Escalator | | | 3.0% | 3.0% | 3.0% |
| O&M Cost Escalator | | | 3.0% | 3.0% | 3.0% |
| Beginning Undesignated Fund Rsrvs | 41,044,000 | 48,028,000 | 50,796,000 | 60,157,000 | 64,961,000 |
| Encumbered Fund Reserves | 29,100,000 | 25,000,000 | 25,000,000 | 25,000,000 | 25,000,000 |
| **REVENUES** | | | | | |
| Sewer Service Charges | 226,733,000 | 233,308,000 | 244,973,000 | 244,973,000 | 254,772,000 |
| Interest Income | 1,927,000 | 1,461,000 | 1,516,000 | 1,703,000 | 1,799,000 |
| Other/Miscellaneous | 6,000,000 | 1,900,000 | 1,900,000 | 1,900,000 | 1,900,000 |
| Total | 234,660,000 | 236,669,000 | 248,389,000 | 248,576,000 | 258,471,000 |
| Debt Proceeds (Net) | 0 | 480,961,000 | 218,569,000 | 230,670,000 | 274,961,000 |
| **EXPENSES** | | | | | |
| **Operating & Maintenance** | | | | | |
| Salaries | 40,334,000 | 42,006,000 | 43,266,000 | 44,564,000 | 45,901,000 |
| Benefits | 17,881,000 | 19,825,000 | 20,420,000 | 21,033,000 | 21,664,000 |
| Non-Personnel Services | 14,615,000 | 13,933,000 | 14,351,000 | 14,782,000 | 15,225,000 |
| Materials & Supplies | 9,400,000 | 9,400,000 | 9,682,000 | 9,972,000 | 10,271,000 |
| Overhead & Capital Outlay | 2,590,000 | 2,590,000 | 2,668,000 | 2,748,000 | 2,830,000 |
| Light/Heat/Power | 10,055,000 | 9,334,000 | 9,614,000 | 9,902,000 | 10,199,000 |
| SFPUC Admin Svcs | 24,591,000 | 25,071,000 | 25,823,000 | 26,598,000 | 27,396,000 |
| Services of Other Depts | 22,090,000 | 22,059,000 | 22,721,000 | 23,403,000 | 24,105,000 |
| Rent Savings | 0 | (563,000) | (1,160,000) | (1,195,000) | (1,231,000) |
| New Projects | 0 | 3,453,000 | (566,000) | 0 | 0 |
| Incremental O&M for SSIP | 0 | 0 | 303,000 | 365,000 | 431,000 |
| Subtotal | 141,556,000 | 147,108,000 | 147,122,000 | 152,172,000 | 156,791,000 |
| **Debt Service** | | | | | |
| Outstanding Bonds (Net) | 42,274,000 | 41,429,000 | 42,241,000 | 42,479,000 | 42,620,000 |
| Outstanding SRF Loans | 10,983,000 | 9,421,000 | 9,040,000 | 6,288,000 | 5,268,000 |
| Less Interest on Outstanding Rsrvs | (898,000) | (898,000) | (898,000) | (898,000) | (898,000) |
| Projected New Debt Service | 0 | 0 | 29,603,000 | 43,056,000 | 57,254,000 |
| Less Capitalized Interst | 0 | 0 | (28,863,000) | (41,980,000) | (55,823,000) |
| Less Int. on New Reserve Funds | 0 | 0 | (404,000) | (588,000) | (782,000) |
| Subtotal | 52,359,000 | 49,952,000 | 50,719,000 | 48,357,000 | 47,639,000 |
| **Non-Operating** | | | | | |
| Revenue-Funded Capital Projects | 33,761,000 | 36,841,000 | 41,187,000 | 43,243,000 | 45,302,000 |
| Bond-Financed CIP Projects | 0 | 209,961,000 | 218,569,000 | 230,670,000 | 274,961,000 |
| CP Program Takeout | | 271,000,000 | 0 | 0 | 0 |
| Subtotal | 33,761,000 | 517,802,000 | 259,756,000 | 273,913,000 | 320,263,000 |
| **Total Expenses** | 227,676,000 | 714,862,000 | 457,597,000 | 474,442,000 | 524,693,000 |
| Revenues Less Expenses | 6,984,000 | 2,768,000 | 9,361,000 | 4,804,000 | 8,739,000 |
| Ending Undesignated Fund Rsrvs | 48,028,000 | 50,796,000 | 60,157,000 | 64,961,000 | 73,700,000 |
| **Net Revenues** | 93,104,000 | 89,561,000 | 101,267,000 | 96,404,000 | 101,680,000 |
| With Ending Undesig Fund Rsrvs | 141,132,000 | 140,357,000 | 161,424,000 | 161,365,000 | 175,380,000 |
| **Debt Service Coverage** | 1.78 | 1.79 | 2.00 | 1.99 | 2.13 |
| With Undesig Fund Reserves | 2.70 | 2.81 | 3.18 | 3.34 | 3.68 |

Table 2
SFPUC Wastewater Enterprise
Project Clean Water CIP

| | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|---|
| **CIP with Cost Escalation*** | 163,900,000 | 209,961,000 | 218,569,000 | 230,670,000 | 274,961,000 |
| **Cumulative Total** | 163,900,000 | 373,861,000 | 592,430,000 | 823,100,000 | 1,098,061,000 |

Source: SFPUC Wastewater Financial Model: SFPUC-#768317v1.XLS

Table 3
SFPUC Wastewater Enterprise
Outstanding Debt Service

| | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|---|
| **OUTSTANDING BONDS** | | | | | |
| Series 2003 A Bonds | 32,968,850 | 33,036,275 | 33,149,025 | 33,257,163 | 33,397,894 |
| Series 2010 A Bonds | 2,276,200 | 2,276,200 | 2,276,200 | 2,276,200 | 2,276,200 |
| Series 2010 B Bonds (BABs) | 10,685,426 | 10,685,426 | 10,685,426 | 10,685,426 | 10,685,426 |
| Less 35% Federal Int Reimb | *incl as rev* | (3,739,899) | (3,739,899) | (3,739,899) | (3,739,899) |
| Less Capitalized Interest | (3,656,820) | (828,949) | (129,534) | 0 | 0 |
| Subtotal 2010 B Bonds | 7,028,606 | 6,116,578 | 6,815,993 | 6,945,527 | 6,945,527 |
| **Total Outstanding Bonds** | **42,273,656** | **41,429,053** | **42,241,218** | **42,478,889** | **42,619,620** |
| **OUTSTANDING SRF LOANS** | **10,982,879** | **9,421,497** | **9,040,461** | **6,287,512** | **5,267,636** |
| **TOTAL DEBT SERVICE** | **53,256,534** | **50,850,550** | **51,281,679** | **48,766,402** | **47,887,256** |

Table 4
SFPUC Wastewater Enterprise
Estimated Bond Debt Service
*Per $100 Million of Project Funding*

| **Repayment Term** | | **30 Years** | **30 Years** |
|---|---|---|---|
| **Cap I Term** | | **3 Years** | **2 Years** |
| **Funding Target** | | $100,000,000 | $100,000,000 |
| **Total Debt Issue** | | $123,100,000 | $116,350,000 |
| **Project Funding** | | $100,000,000 | $100,000,000 |
| **Issuance Costs & Reserve Requirement** | | | |
| Underwriter Discount | 0.75% | $923,000 | $873,000 |
| Issuance Costs | Rough Est. | 300,000 | 300,000 |
| Reserve Requirement | 1/2 MADS | 4,204,000 | 3,905,000 |
| Capitalized Interest Deposit* | | 17,643,000 | 11,232,000 |
| Rounding/Contingency | | 30,000 | 40,000 |
| Total | | 23,100,000 | 16,350,000 |
| **Financing Terms** | | | |
| Term (Years) | | 30 | 30 |
| Interest Only (Years) | | 3 | 2 |
| Principal Amortization (Years) | | 27 | 28 |
| Est. Future Interest Rate | | 5.00% | 5.00% |
| **Annual Debt Service** | | | |
| Interest Only Period | | 6,155,000 | 5,818,000 |
| Principal Amortization Period | | 8,407,000 | 7,810,000 |

* Net funded; assumes Cap I funds 97.5% of annual interest payments.
*Financing costs and interest rates estimated for financial planning purposes.*

Table 5
SFPUC Wastewater Enterprise
Projected Debt Service

| Debt Issuance by FY | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|
| **Bond Series** | Series 2013 | Series 2014 | Series 2015 | Series 2016 |
| **CIP Project Funding Target** | 480,961,000 | 218,569,000 | 230,670,000 | 274,961,000 |
| **Debt Service per $100M** | | | | |
| 3 Years Interest Only | 6,155,000 | 6,155,000 | 6,155,000 | 6,155,000 |
| 27 Years Principal Amortization | 8,407,000 | 8,407,000 | 8,407,000 | 8,407,000 |
| **Annual Debt Service** | | | | |
| During 3-Yr Interest Only Period | 29,603,000 | 13,453,000 | 14,198,000 | 16,924,000 |
| During Principal Amortization Peric | 40,434,000 | 18,375,000 | 19,392,000 | 23,116,000 |
| *Cumulative MADS* | *40,434,000* | *58,809,000* | *78,201,000* | *101,317,000* |
| **Projected Debt Service by Fiscal Year (Gross)** | | | | |
| Series 2013 Bonds | | 29,603,000 | 29,603,000 | 29,603,000 |
| Series 2014 Bonds | | | 13,453,000 | 13,453,000 |
| Series 2015 Bonds | | | | 14,198,000 |
| Series 2016 Bonds | | | | |
| Total | | 29,603,000 | 43,056,000 | 57,254,000 |

Table 6
SFPUC Wastewater Enterprise
Projected Capitalized Interest Drawdown

| Debt Issuance by FY | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|
| **Capitalized Interest Drawdown on Projected New Debt** | | | | |
| Series 2013 Bonds | - | 28,863,000 | 28,863,000 | 28,863,000 |
| Series 2014 Bonds | - | - | 13,117,000 | 13,117,000 |
| Series 2015 Bonds | - | - | - | 13,843,000 |
| Series 2016 Bonds | - | - | - | - |
| Subtotal | 0 | 28,863,000 | 41,980,000 | 55,823,000 |

Table 7
SFPUC Wastewater Enterprise
Estimated Interest Income on Debt Reserve Funds

| | Reserve Fund | Rate | 2011/12 | 2012/13 | 2013/14 | 2014/15 | 2015/16 |
|---|---|---|---|---|---|---|---|
| **Outstanding Debt Issues** | | | | | | | |
| Series 2003 A | 16,212,000 | 2.5% | 405,000 | 405,000 | 405,000 | 405,000 | 405,000 |
| Series 2010 A | 3,874,000 | 2.5% | 97,000 | 97,000 | 97,000 | 97,000 | 97,000 |
| Series 2010 B | 15,853,000 | 2.5% | 396,000 | 396,000 | 396,000 | 396,000 | 396,000 |
| Subtotal | | | 898,000 | 898,000 | 898,000 | 898,000 | 898,000 |
| **Projected Debt Issues*** | | | | | | | |
| Series 2013 | 20,217,000 | 2.0% | - | - | 404,000 | 404,000 | 404,000 |
| Series 2014 | 9,188,000 | 2.0% | - | - | - | 184,000 | 184,000 |
| Series 2015 | 9,696,000 | 2.0% | - | - | - | - | 194,000 |
| Series 2016 | 11,558,000 | 2.0% | - | - | - | - | - |
| Subtotal | | | 0 | 0 | 404,000 | 588,000 | 782,000 |
| Total Reserve Interest Income | | | 898,000 | 898,000 | 1,302,000 | 1,486,000 | 1,680,000 |

* Reserve requirement projected at 1/2 of maximum annual debt service.

# SAN FRANCISCO
# PLANNING DEPARTMENT

1650 Mission St.
Suite 400
San Francisco,
CA 94103-2479

Reception:
**415.558.6378**

Fax:
**415.558.6409**

Planning
Information:
**415.558.6377**

**Certificate of City and County of San Francisco Planning Department Regarding Proposed Sale of Commercial Paper (Wastewater Series) in an amount not to exceed $300,000,000**

I, Bill Wycko, Environmental Review Officer of the Planning Department of the City and County of San Francisco (the Planning Department), hereby certify as follows:

1. As the Environmental Review Officer (ERO) of the Planning Department, I am authorized to certify as to the compliance of the San Francisco Public Utilities Commission (SFPUC) with applicable requirements of the California Environmental Quality Act. (CEQA).

2. After consultation with the SFPUC, I understand that the SFPUC proposes to sell Commercial Paper (Wastewater Series) in an amount not to exceed $300,000,000 (the "Paper") to finance certain improvements to the Wastewater Enterprise of the City and County of San Francisco (the "City"). The improvements proposed for financing include those projects described in the following document, attached to this Certificate as Exhibits A.

3. I understand that Section 8B.124 of the City Charter grants authority to the City's Board of Supervisors to approve the issuance of indebtedness, including commercial paper, by ordinance upon two-thirds vote of its members and under certain conditions. A draft of an ordinance relating to the Paper is attached hereto as Exhibit B (the Ordinance.)

4. I understand that one of the conditions to the Board of Supervisor's authorization of such indebtedness is the delivery of a certificate of the Planning Department regarding the additional projects to be financed.

5. The San Francisco Planning Commission certifies Environmental Impact Reports as they are completed pursuant to CEQA. In addition, the Planning Department approves Initial Study/Mitigated Negative Declarations, and the ERO approves Categorical Exemptions.

6. Based on a preliminary review of the additional Projects and discussions with the SFPUC regarding the requirements for undertaking such additional Projects, I certify that the Projects under the jurisdiction of the SFPUC to be funded with proceeds of the Paper, as such Paper is described in the Ordinance, (a) comply with applicable requirements of CEQA, or (b) are not considered to be projects under CEQA at this time and will undergo CEQA if and when they *are* defined. Pursuant to the provisions of Chapter 31 of the San Francisco Administrative

Code, any additional Project to be financed will comply with such applicable requirements prior to any draw on the Commercial Paper funds to finance the acquisition or construction of such facilities.

In witness whereof, the undersigned has executed this certification as of this 28th day of February, 2012

BILL WYCKO

Environmental Review Officer

EXHIBIT A
WASTEWATER ENTERPRISE COMMERCIAL PAPER

| | | | |
|---|---|---|---|
| Interim Capital Improvement Program (ICIP) | CENMSCIC23 | SUNNYDALE SEWER IMPROVEMENTS | Addendum to Mitigated Negative Declaration September 12, 2011 |
| ICIP | CENMSCIC31 | SEWPCP 620 & 680 DIGESTER COMPRESSOR | Categorical Exemption Determination April 17, 2009 |
| ICIP | CENMSCIC34 | FOLSOM ST SEWER REPLACEMENT | Statutory Exemption Determination |
| ICIP | CENMSCIC36 | WWE FACILITY SECURITY/EMERGENCY RESPONSE | CEQA Compliance Pending, Categorical Exemption Predicted |
| ICIP | CENMSCIC37 | WWE FACILITY RELIABLILITY IMPROVEMENTS | CEQA Compliance Pending, Categorical Exemption Predicted |
| ICIP | CENMSCIC38 | SEP SOLIDS HANDLING IMPROVEMENTS | Categorical Exemption Determination November 23, 2011 |
| ICIP | CENMSCIC39 | OCEANSIDE SOLIDS HANDLING IMPROVEMENTS | CEQA Compliance Pending Categorical Exemption Predicted |
| ICIP | CENMSCIC40 | MARIPOSA/NORTHSHORE RELIABILITY | Categorical Exemption Determination June 1, 2010 |
| ICIP | CENMSCIC42 | SWOO STABILIZATION EMERGENCY WORK | Categorical Exemption Determination November 22, 2011 |
| ICIP | CENMSCIC43 | RICHMOND DRAINAGE PH. 2 | Pre-Construction Planning and Design, not a "project" under CEQA §15378 |
| ICIP | CENMSCIC44 | CESAR CHAVEZ PH. 2 | Pre-Construction Planning and Design, not a "project" under CEQA §15378 |
| ICIP | CENMSCIC48 | CHANNEL PUMP STATION PH. 3 | Categorical Exemption Determination November 3, 2011 |
| ICIP | CENMSCIC50 | AS-NEEDED SEWER REPLACEMENT CONTRACT #1 | Statutory Exemption Determination June 16, 2011 |
| ICIP | CENMSCIC51 | SPOT SEWER REPAIR CONTRACT #25 | Categorical Exemption Determination January 6, 2011 |
| ICIP | CENMSCIC53 | DOWNTOWN DISTRICT SEWER REPAIR | CEQA Compliance Pending Statutory Exemption Predicted |
| ICIP | CENMSCIC55 | CHURCH ST/DUBOCE SEWER REPLACEMENT | |
| ICIP | CENMSCIC56 | POWELL/MASON SEWER REPLACEMENT | Statutory Exemption Determination July 28, 2011 |
| ICIP | CENMSCIC57 | SEWER STAFF FACILITY IMPROVEMENTS | Pre-Construction Planning and Design, not a "project" under CEQA §15378 |

| | | | |
|---|---|---|---|
| ICIP | CENMSCIC58 | VACTOR WASTE STAGING AREA | Pre-Construction Planning and Design, not a "project" under CEQA §15378 |
| ICIP | CENMSCIC59 | SPOT SEWER REPAIR #26 | Categorical Exemption Determination June 20, 2011 |
| ICIP | CENMSCICSR | SEWER REPAIR (Sunnydale Sewer Improvement Project) | Addendum to Mitigated Negative Declaration September 12, 2011 |
| ICIP | CENMSCICTF | TREATMENT FACILITIES IMPROVEMENTS | Source Funding, not a "project" under CEQA §15378, Individual projects will be subject to CEQA compliance |
| Other Capital Improvement Program (OCIP) | CENMSCSP06 | CLEAN WATER MASTER PLAN | Program Management, not a "project" under CEQA §15378 |
| OCIP | CWP11001 | TREASURE ISLAND CAPITAL IMPROVEMENTS | Final Environmental Impact Report Certified June 7, 2011 |
| Sewer System Improvement Program (SSIP) | CWWBAE01 | BIOFUEL ALTERNATIVE ENERGY PROJECT | Categorical Exemption Determination February 6, 2008 |
| SSIP | CWWLID00 | LOW IMPACT DESIGN PROJECT | Cesar Chavez Sewer Improvement Project, Addendum to Mitigated Negative Declaration April 28, 2011 |
| SSIP | CWWLID01 | LOW IMPACT DESIGN PROJECT | Cesar Chavez Sewer Improvement Project, Addendum to Mitigated Negative Declaration April 28, 2011 |
| Renewal & Replacement (R&R) | CWWRNRCS04 | VARIOUS SEWER LOCATIONS #1 | Categorical Exemption Determination June 7, 2011 |
| R&R | CWWRNRCS22 | BAKER/BLAKE/COOK-SEWER REPAIR/CPFRNR | Statutory Exemption Determination December 9, 2010 |
| R&R | CWWRNRCS23 | AUBURN ST SEWER REPLACEMENT | Categorical Exemption Determination February 16, 2010 |
| R&R | CWWRNRCS25 | 21ST/23RD/24TH-HAMPSHIRE/YORK | Statutory Exemption Determination January 5, 2011 |
| R&R | CWWRNRCS26 | BALBOA ST SEWER REPLACEMENT | Department of Public Works Street Resurfacing Project Certificates of Participation Categorical Exemption Determination November 3, 2010 |
| R&R | CWWRNRCS27 | SOMA ALLEY SEWER IMPROVEMENTS | Department of Public Works Street Resurfacing Project Certificates of Participation Categorical Exemption Determination November 3, 2010 |
| R&R | CWWRNRCS28 | 18TH ST EMERGENCY SEWER REPAIR | Emergency Declaration March 7, 2011 CEQA §15269 |
| R&R | CWWRNRCS29 | BUCHANAN/PIERCE/FILBERT/ | Statutory Exemption Determination March 14, 2011 |

| | | | |
|---|---|---|---|
| | | MARINA | |
| R&R | CWWRNRCS30 | VARIOUS LOCATIONS SEWER REPL#3 | Statutory Exemption Determination March 14, 2011 |
| R&R | CWWRNRCS31 | POST ST EMERGENCY SEWER REPAIR | Emergency Declaration April 27, 2011 CEQA §15269 |
| R&R | CWWRNRCOI01 | OUTFALL INSPECTION/RECEIVING WATER | Southwest Ocean Outfall Dilution Study – Categorical Exemption Determination November 7, 2011<br>Bayside Salt Water Intrusion Prevention - CEQA Compliance Pending Categorical Exemption Predicted |
| SSIP | CWWSIPPL01 | PROGRAM MANAGEMENT | Program Management, not a "project" under CEQA §15378 |

| | | | |
|---|---|---|---|
| ICIP | CENMSCICSR | SEWER REPAIR | Source Funding, not a "project" under CEQA §15378, Individual projects will be subject to CEQA compliance |
| ICIP | CENMSCICTF | TREATMENT FACILITIES IMPROVEMENTS | Source Funding, not a "project" under CEQA §15378, Individual projects will be subject to CEQA compliance |
| OCIP | CWP11001 | TREASURE ISLAND CAPITAL IMPROVEMENTS | Source Funding, not a "project" under CEQA §15378, Individual projects will be subject to CEQA compliance |
| SSIP | CWWBAE00 | BIOFUEL ALTERNATIVE ENERGY PROGRAM | Categorical Exemption Determination February 6, 2008 |
| SSIP | CWWLID00 | LOW IMPACT DESIGN PROJECT | Mission Street/Valencia Street Streetscape Improvement CEQA compliance completed |
| R&R | CWWRNRCS00 | WWE RNR COLLECTION SYSTEM | Source Funding, not a "project" under CEQA §15378, Individual projects will be subject to CEQA compliance |
| OCIP | CWWRNROI01 | OUTFALL INSPECTION/RECEIVING WATER | Bayside Salt Water Intrusion Prevention - CEQA Compliance Pending Categorical Exemption Predicted |
| SSIP | CWWSIPCT00 | CENTRAL BAYSIDE SYSTEM IMPROVEMENTS | Planning and Design Phases only, not a "project" under CEQA §15378 |
| SSIP | CWWSIPDP00 | BIOSOLIDS/DIGESTER PROJECT BUDGET | Planning and Design Phases only, not a "project" under CEQA §15378 |
| SSIP | CWWSIPNC00 | NORTHSHORE TO CHANNEL FORCE MAIN | Mitigated Negative Declaration under Planning Case Number 2011.1370E |

| | | | |
|---|---|---|---|
| SSIP | CWWSIPPL00 | SSIP PLANNING PROJECT | Planning and Design Phases and Project Management only, not a "project" under CEQA §15378 |
| SSIP | CWWSIPPS00 | BAYSIDE & WESTSIDE PUMP STATIONS | Condition Assessment only, not a "project" under CEQA §15378 |
| SSIP | CWWSIPRB00 | RICHMOND BASIN IMPROVEMENTS | Planning Phase only, not a "project" under CEQA §15378 |
| SSIP | CWWSIPUW00 | URBAN WATERSHED ASSESSMENT PROJECT | Planning Phase only, not a "project" under CEQA §15378 |

FILE NO. 100340 ORDINANCE NO. 93-10

[Wastewater Revenue Bond Issuance – Not to Exceed $297,756,235]

**Ordinance approving the issuance and sale of wastewater revenue bonds in an aggregate principal amount not to exceed $297,756,235 by the San Francisco Public Utilities Commission to finance various projects benefitting the Wastewater Enterprise pursuant to amendments to the Charter of the City and County of San Francisco enacted by the voters on November 5, 2002, as Proposition E; and ratifying previous actions taken in connection therewith.**

Be it ordained by the People of the City and County of San Francisco:

Section 1. Findings. The Board of Supervisors (the "Board") of the City hereby finds and declares as follows:

A. On November 5, 2002, the voters of the City and County of San Francisco (the "City") approved Proposition E, codified as Article VIIIB of the Charter of the City (the "Charter"), which among other things, authorized the Commission to issue revenue bonds, including notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors, for the purpose of reconstructing, replacing, expanding, repairing or improving water facilities or clean water facilities, or combinations of water and clean water facilities under the jurisdiction of the Commission; and,

B. The Commission adopted the Indenture dated as of January 1, 2003, between the Commission and U. S. Bank National Association (the "Indenture") and in connection therewith, issued the first series of bonds under the Indenture to finance projects benefitting the Wastewater Enterprise, designated the "Public Utilities Commission of the City and County of San Francisco Clean Water Revenue Bonds, 2003 Refunding Series A" (the "2003

Refunding Series A Bonds"), in the original principal amount of $396,270,000 to finance projects of the Wastewater Enterprise, previously referred to from time to time as the "Clean Water Enterprise", and,

C. Section 8B.124 of the Charter allows for the issuance of revenue bonds or other forms of indebtedness by ordinance approved by two-thirds of the Board, subject to the provision of certain certifications of an independent engineer retained by the Commission and certain certifications by the San Francisco Planning Department, which certifications shall make the findings and determinations set forth in Section 8B.124, and

D. The Board now desires to authorize the issuance and sale of the Wastewater Revenue Bonds by the Commission pursuant to said Section 8B.124.

E. This Board is concurrently considering with this ordinance Capital Improvement Program related supplemental budget appropriations totaling $241,182,550, including related financing costs totaling $56,573,685.

Section 2. Approval of the Wastewater Revenue Bonds. The Board hereby declares that the Certificates satisfy the requirements of Section 8B. 124 of the Charter, and in accordance therewith, the Commission is hereby authorized to issue the Wastewater Revenue Bonds pursuant to Section 8B. 124 of the Charter to finance a portion of the design, acquisition and construction of the Capital Projects, as well as paying costs of issuance and other incidental costs relating thereto; and the Board hereby approves the issuance and sale of the Wastewater Revenue Bonds in one or more series from time to time by the Commission pursuant to Section 8B. 124 of the Charter and in accordance with the Commission Resolution, in an aggregate principal amount not to exceed $297,756,235, representing $241,182,550 in supplemental capital improvement program appropriations and $56,573,685 in financing costs, at a maximum rate or rates of interest of not to exceed twelve percent (12%) per annum. The Commission is hereby authorized to determine the timing, amount and manner

of sale of each series of Wastewater Revenue Bonds issued pursuant to this authorization; provided however Commission's authorization to issue Wastewater Revenue Bonds is subject to (i) the filing with the Commission and the Board of the certifications required by approval by 8B1.24, and (ii) the approval by the Board of the form of offering document prepared in connection with issuance of the Wastewater Revenue Bonds .

Section 3. General Authority. The Controller, Treasurer, the City Attorney and other officers of the City and their duly authorized deputies and agents are hereby authorized and directed, jointly and severally, to take such actions and to execute and deliver such certificates, agreements, requests or other documents, as they may deem necessary or desirable to facilitate the issuance, sale and delivery of the Wastewater Revenue Bonds, to obtain bond insurance or other credit enhancements with respect to the Wastewater Revenue Bonds, to obtain a surety bond, to obtain title and other insurance with respect to the facilities to be financed, and otherwise to carry out the provisions of this Ordinance.

Section 4. Ratification of Prior Actions. All actions authorized and directed by this Ordinance and heretofore taken are hereby ratified, approved and confirmed by this Board.

Section 5. File Documents. All documents referred to as on file with the Clerk of the Board are in File Nos. 100340.

Section 6. Effective Date. Pursuant to Section 14.102 of the Charter, this Ordinance shall take effect thirty (30) days after its adoption.

APPROVED AS TO FORM:
DENNIS J. HERRERA, City Attorney

By: _____
Mark D. Blake
Deputy City Attorney

# City and County of San Francisco
## Tails
## Ordinance

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

**File Number:** 100340 **Date Passed:** April 27, 2010

Ordinance approving the issuance and sale of wastewater revenue bonds in an aggregate principal amount not to exceed $297,756,235 by the San Francisco Public Utilities Commission to finance various projects benefitting the Wastewater Enterprise pursuant to amendments to the Charter of the City and County of San Francisco enacted by the voters on November 5, 2002, as Proposition E; and ratifying previous actions taken in connection therewith.

April 20, 2010 Board of Supervisors - PASSED ON FIRST READING

Ayes: 10 - Alioto-Pier, Avalos, Campos, Chiu, Chu, Daly, Dufty, Elsbernd, Mar and Mirkarimi
Excused: 1 - Maxwell

April 27, 2010 Board of Supervisors - FINALLY PASSED

Ayes: 10 - Alioto-Pier, Avalos, Campos, Chiu, Chu, Daly, Dufty, Elsbernd, Mar and Mirkarimi
Excused: 1 - Maxwell

File No. 100340

**I hereby certify that the foregoing Ordinance was FINALLY PASSED on 4/27/2010 by the Board of Supervisors of the City and County of San Francisco.**

**Angela Calvillo**
**Clerk of the Board**

5-3-10

**Mayor Gavin Newsom** **Date Approved**

FILE NO. 100339 ORDINANCE NO. 95-10

RO#10031
SA#31

[Appropriating $348,064,054 of State Grants Proceeds from Debt and Fee Revenues for Wastewater Capital Improvements at the Public Utilities Commission for FY2009-2010]

**Ordinance appropriating $348,064,054 of state grants, proceeds from debt and fee revenues for the San Francisco Public Utilities Commission (SFPUC) Wastewater Enterprise's Capital Improvement Program for FY2009-2010, and placing $329,962,235 by project on Controller's reserve subject to SFPUC's and Board of Supervisors' discretionary approval following completion of project-related analysis pursuant to the California Environmental Quality Act (CEQA), where required, and receipt of proceeds of indebtedness, grant funds and fee revenues.**

Be it ordained by the People of the City and County of San Francisco:

Section 1. The sources of funding outlined below are herein appropriated to reflect the funding available for Fiscal Year 2009-2010.

**SOURCES Appropriation**

| Fund | Index Code / Project Code | Subobject | Description | Amount |
|---|---|---|---|---|
| 5C AGT STA – Wastewater Enterprise Funds – Operating Grants – State Fund | *CWP5CAGTSTA / CENMSCICSR00 – Sewer Replacement | 48999 | Other State Grants | $30,000,000 |

| Fund | Index Code / Project Code | Subobject | Description | Amount |
|---|---|---|---|---|
| 5C CPF CAP - CWP-Capital Projects-Capacity Fee Program | *CWP5CCPFCAP / CWWRNR00 – Wastewater Enterprise Renewal & Replacement | 99999B | Capacity Fees – Fund Balance | $18,101,819 |
| 5C CPF CAP - CWP-Capital Projects-Capacity Fee Program | *CWP5CCPFCAP / CWWRNR00 – Wastewater Enterprise Renewal & Replacement | 79993 | Capacity Fees – Projected | $2,206,000 |
| 5C CPF 11A - CWP-Capital Projects-2011A Bond Fund | *CWP5CCPF11A / CENMSCICFC – Wastewater Repair & Replacement Financing Costs | 80111 | Proceeds Sale of Bonds | $119,883,951 |
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A / CENMSCICFC – Wastewater Repair & Replacement Financing Costs | 80111 | Proceeds Sale of Bonds | $177,872,284 |
| **Total SOURCES Appropriation** | | | | **$348,064,054** |

Section 2. The uses of funding outlined below are herein appropriated in Subobject 06700 Buildings Structures and Improvements and 081C4 Internal Audits, and reflects the projected uses of funding to support the Wastewater Capital Improvement Program at the San Francisco Public Utilities Commission for Fiscal Year 2009-2010.

**USES Appropriation**

| Fund | Index Code / Project Code | Subobject | Description | Amount |
|---|---|---|---|---|
| 5C CPF 11A - CWP-Capital Projects-2011A Bond Fund | *CWP5CCPF11A Project: CENMSCSPO600 | 06700 Buildings, Structures, and Improvements | Sewer System Improvement Program - Planning | $11,625,000 |
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A Project: CENMSCSPO600 | 06700 Buildings, Structures, and Improvements | Sewer System Improvement Program - Planning | $10,300,000 |
| 5C CPF 11A - CWP-Capital Projects-2011A Bond Fund | *CWP5CCPF11A Project: CWWLID00 | 06700 Buildings, Structures, and Improvements | Low Impact Design Project | $2,000,000 |
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A Project: CWWLID00 | 06700 Buildings, Structures, and Improvements | Low Impact Design Project | $3,000,000 |

| Fund | Index Code / Project Code | Subobject | Description | Amount |
|---|---|---|---|---|
| 5C CPF 11A - CWP-Capital Projects-2011A Bond Fund | *CWP5CCPF11A Project: CWWBAE00 | 06700 Buildings, Structures, and Improvements | Biofuel / Alternative Energy Program | $2,560,000 |
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF11A Project: CWWBAE00 | 06700 Buildings, Structures, and Improvements | Biofuel / Alternative Energy Program | $3,210,000 |
| 5C CPF 11A - CWP-Capital Projects-2011A Bond Fund | *CWP5CCPF11A Project: CENMSCICTF00 | 06700 Buildings, Structures, and Improvements | Aging Infrastructure – Wastewater Enterprise Facilities | $50,464,000 |
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A Project: CENMSCICTF00 | 06700 Buildings, Structures, and Improvements | Aging Infrastructure – Wastewater Enterprise Facilities | $40,582,284 |
| 5C CPF 11A - CWP-Capital Projects-2011A Bond Fund | *CWP5CCPF11A Project: CENMSCICSR00 | 06700 Buildings, Structures, and Improvements | Aging Infrastructure – Sewer/Collection System | $14,758,000 |
| 5T AGT STA – Hetch Hetchy Operating Grants – State Fund | *CWP5TAGTSTA Project: CENMSCICSR00 | 06700 Buildings, Structures, and Improvements | Aging Infrastructure – Sewer/Collection System | $30,000,000 |

| Fund | Index Code / Project Code | Subobject | Description | Amount |
|---|---|---|---|---|
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A Project: CENMSCICSR00 | 06700 Buildings, Structures, and Improvements | Aging Infrastructure – Sewer/Collection System | $24,261,400 |
| 5C CPF 11A - CWP-Capital Projects-2011A Bond Fund | *CWP5CCPF11A Project: CWWRNR00 | 06700 Buildings, Structures, and Improvements | Wastewater Enterprise – Renewal & Replacement | $12,699,000 |
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A Project: CWWRNR00 | 06700 Buildings, Structures, and Improvements | Wastewater Enterprise – Renewal & Replacement | $12,722,866 |
| 5C CPF CAP - CWP-Capital Projects-Capacity Fee Program | *CWP5CCPFCAP Project: CWWRNR00 | 06700 Buildings, Structures, and Improvements | Wastewater Enterprise – Renewal & Replacement | $20,307,819 |
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A Project: CWWSIPDP | 06700 Buildings, Structures, and Improvements | SSIP – Biosolids / Digester Project | $27,000,000 |

| Fund | Index Code / Project Code | Subobject | Description | Amount |
|---|---|---|---|---|
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A Project: CWWSIPCT | 06700 Buildings, Structures, and Improvements | SSIP – Channel Tunnel Project | $20,000,000 |
| 5C CPF 11A - CWP-Capital Projects-2011A Bond Fund | *CWP5CCPF11A Project: CWP11001 | 06700 Buildings, Structures, and Improvements | Treasure Island Improvements | $3,000,000 |
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A Project: CWP11001 | 06700 Buildings, Structures, and Improvements | Treasure Island Improvements | $3,000,000 |
| 5C CPF 11A - CWP-Capital Projects-2011A Bond Fund | *CWP5CCPF11A Project: CENMSCICFC | 06700 Buildings, Structures, and Improvements | Financing Costs | $22,483,123 |
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A Project: CENMSCICFC | 06700 Buildings, Structures, and Improvements | Financing Costs | $33,507,581 |
| 5C CPF 11A - CWP-Capital Projects-2011A Bond Fund | *CWP5CCPF11A Project: CENMSCICFC | 081C4 Internal Audits | City Services Auditor | $294,828 |

| Fund | Index Code / Project Code | Subobject | Description | Amount |
|---|---|---|---|---|
| 5C CPF 12A - CWP-Capital Projects-2012A Bond Fund | *CWP5CCPF12A Project: CENMSCICFC | 081C4 Internal Audits | City Services Auditor | $288,153 |
| **Total USES Appropriation** | | | | **$348,064,054** |

Section 3: $329,962,235 of the total appropriation is hereby placed on Controller's Appropriation Reserve by project. Release of appropriation reserves by the Controller is subject to the prior occurrence of: 1) the SFPUC's and the Board of Supervisors' discretionary adoption of CEQA Findings for projects, following review and consideration of completed project-related environmental analysis, where required, pursuant to CEQA, the State CEQA Guidelines, and Chapter 31 of the San Francisco Administrative Code, and 2) the Controller's certification of funds availability, including proceeds of indebtedness, grant funds and fee revenues.

FUNDS AVAILABLE

APPROVED AS TO FORM:

BEN ROSENFIELD

DENNIS J. HERRERA, City Attorney

Controller

By:

By:

Deputy City Attorney

Date: 3/16/2010

# City and County of San Francisco
## Tails
## Ordinance

City Hall
1 Dr. Carlton B. Goodlett Place
San Francisco, CA 94102-4689

**File Number:** 100339 **Date Passed:** April 27, 2010

Ordinance appropriating $348,064,054 of state grants proceeds from debt and fee revenues for the San Francisco Public Utilities Commission (SFPUC) Wastewater Enterprise's Capital Improvement Program for FY2009-2010, and placing $329,962,235 by project on Controller's reserve subject to SFPUC and Board of Supervisor's discretionary approval following completion of project-related analysis pursuant to the California Environmental Quality Act, where required, and receipt of proceeds of indebtedness, grant funds, and fee revenues.

April 20, 2010 Board of Supervisors - PASSED, ON FIRST READING

Ayes: 10 - Alioto-Pier, Avalos, Campos, Chiu, Chu, Daly, Dufty, Elsbernd, Mar and Mirkarimi
Excused: 1 - Maxwell

April 27, 2010 Board of Supervisors - FINALLY PASSED

Ayes: 10 - Alioto-Pier, Avalos, Campos, Chiu, Chu, Daly, Dufty, Elsbernd, Mar and Mirkarimi
Excused: 1 - Maxwell

File No. 100339

**I hereby certify that the foregoing Ordinance was FINALLY PASSED on 4/27/2010 by the Board of Supervisors of the City and County of San Francisco.**

**Angela Calvillo**
**Clerk of the Board**

**Mayor Gavin Newsom**

5/3/2010
**Date Approved**

San Francisco Water Power Sewer

Services of the San Francisco Public Utilities Commission

# AGENDA ITEM
## Public Utilities Commission
*City and County of San Francisco*

DEPARTMENT Financial Services AGENDA NO. **15**

MEETING DATE December 13, 2011

**Wastewater Commercial Paper Program Increase from $150 million to $300 million:**
Regular Calendar

**Project Manager:** Charles Perl

**Authorize an Increase of the Wastewater Commercial Paper Notes Program to $300 million from $150 million:**

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| **Summary of Proposed Commission Action** | **Authorize** an increase in the San Francisco Public Utilities Commission's Wastewater Enterprise Commercial Paper Notes Program (Program) to $300,000,000 from $150,000,000; direct the General Manager to request approval from the Board of Supervisors for such increase; and direct the General Manager to solicit and negotiate banking proposals to provide bank credit facilities to support such increase. |
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| **Background and Description of Scope of Services:** | The Wastewater Commercial Paper Program provides access to low-cost, short-term financing for Wastewater Enterprise capital projects, the Wastewater Enterprise's Capital Improvement Program (CIP) and Sewer System Improvement Program (SSIP) in advance of the issuance of long-term Wastewater Revenue Bonds. The credit markets require that a commercial paper program have credit support through a letter of credit or liquidity facility.<br><br>On July 27, 2010, Commission Resolution 10-0114 established certain Levels of Service Goals for the proposed SSIP. These goals anticipated the issuance of more than $4 billion of revenue bonds over the following decade if projects within the proposed SSIP are approved and implemented.<br><br>Currently, the Wastewater Enterprise is implementing capital projects budgeted in FY 2010-11 and FY 2011-12 with a total appropriation of |

**APPROVAL:**

DEPARTMENT / BUREAU

COMMISSION SECRETARY Mike Housh

FINANCE Todd L. Rydstrom

GENERAL MANAGER Ed Harrington

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| | $271.2 million. Until the next revenue bond issuance, the projects can be partially financed by the existing $150 million Wastewater Enterprise commercial paper program authorized under Proposition E.<br><br>The current commercial paper capacity meets the Wastewater Enterprise's expenditure and encumbrance needs through March 2012, after which time the Wastewater Enterprise will need to either increase the size of its commercial paper program or issue long-term revenue bonds. Due to commercial paper's low cost and flexibility relative to long-term revenue bonds, staff recommends increasing the size of the commercial paper program to $300 million from $150 million. An increase by $150 million will ensure adequate capacity to meet the already authorized capital projects for FY 2010-11 and FY 2011-12, and will also provide some capacity, if needed, to fund a portion of FY 2012-13 projects, if finally approved. Without an increase in commercial paper, the Wastewater Enterprise would have to sell revenue bonds in the Spring of 2012 to meet projected expenditure needs. With an increase in the commercial paper capacity to $300 million, the next long-term Wastewater Revenue Bond sale is anticipated in the Spring of 2013.<br><br>The advantage to delaying the issuance of bonds until the Spring of 2013 would be that the sale could coincide with a potential refunding of the 2003 Wastewater Revenue Bonds which, in addition to providing debt service savings at current interest rates, would trigger the already adopted springing amendment which then allows the debt service reserve to be funded at 50% of Maximum Annual Debt Service instead of 100% of Maximum Annual Debt Service. This change would put the Wastewater Enterprise on par with the Water Enterprise in terms of this provision and generates savings of approximately $6.6 million for every $100 million of debt issued. |
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| **Result of Inaction:** | A delay in this authorization could accelerate the frequency of long-term bond issuances, which would include higher associated borrowing costs. |
| **Budget & Costs:** | The Wastewater Enterprise capital budget and associated appropriations cover these associated costs. |
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| **Recommendation:** | SFPUC staff recommends that the Commission adopt the attached resolution. |
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| **Attachments:** | 1. SFPUC Resolution<br>2. Presentation |

# PUBLIC UTILITIES COMMISSION

City and County of San Francisco

RESOLUTION NO. **11-0197**

WHEREAS, On November 5, 2002, the voters of the City and County of San Francisco (the "City") approved Proposition E, which among other things, authorized the San Francisco Public Utilities Commission (the "Commission") to issue indebtedness, including revenue bonds, notes, commercial paper or other forms of indebtedness, when authorized by ordinance approved by a two-thirds vote of the Board of Supervisors of the City (the "Board"), for the purpose of reconstructing, replacing, expanding, repairing or improving wastewater facilities under the jurisdiction of the Commission (the "Wastewater Enterprise"); and

WHEREAS, Pursuant to Section 43.5 of the San Francisco Administrative Code, enacted by Ordinance No 203-98 adopted by the Board on June 8, 1998, and signed by the Mayor of the City on June 19, 1998, the Board established a procedure pursuant to which the Commission may issue short-term indebtedness, including the issuance of commercial paper in anticipation of the issuance of its revenue bonds; and

WHEREAS, Under Section 8B.124 of the Charter of the City (the "Charter"), the Board's authority to authorize an issuance of debt under Proposition E is subject to its receipt of a certification from an independent engineer that (i) the projects to be financed by such debt meet utility standards and (ii) estimated net revenue will be sufficient to meet operating, maintenance, debt service coverage and other indenture or resolution requirements (the "Engineer Certification"); and

WHEREAS, The Board's authority to authorize an issuance of debt under Proposition E is also subject to its receipt of a certification from the San Francisco Planning Department that facilities financed with such debt will comply with applicable requirements of the California Environmental Quality Act (together with the Engineer Certification, the "Proposition E Certificates"); and

WHEREAS, The Commission (Resolution No. 06-0164) and the Board (Ordinance No. 266-06) have previously authorized the issuance of commercial paper notes for the Wastewater Enterprise in an aggregate principal amount not to exceed $150,000,000 against Proposition E authorization; and

WHEREAS, on July 27, 2010, Commission Resolution 10-0114 established Levels of Service Goals for the proposed Sewer System Improvement Program Goals, which anticipates the issuance of more than $4 billion dollars of revenue bonds over the upcoming decade if projects within the SSIP are approved and implemented; and

WHEREAS, the Commission has determined that it is desirable to provide $150,000,000 additional short-term financing of capital improvements, capitalized interest and related costs for improvements, betterments and additions to the Wastewater Enterprise of the City through the increase in the amount which may be outstanding at any one time, increasing authorization to $300 million from $150,000,000 of commercial paper notes, exclusive of interest reserve, if applicable (the "Notes") or bank notes (the "Bank Notes"); and

WHEREAS, Certificates meeting the Proposition E requirements are on file with the Clerk of the Board in File No. 061298 and as part of Ordinance No. 266-06, and revised Proposition E Certificates describing additional proposed improvements to the facilities of the Wastewater Enterprise are needed; and

WHEREAS, The Commission has determined that it is necessary and desirable to make certain additional improvements to the facilities of the Wastewater Enterprise (the "Improvements"), and has further determined to finance the Improvements through the issuance of wastewater revenue bonds, and in anticipation of the issuance of such wastewater revenue bonds, through the expansion of the use of the Commission's commercial paper program and the issuance and reissuance of its commercial paper notes from time to time; and

WHEREAS, On April 27, 2010, the Board adopted Ordinance No. 95-10 appropriating $348,064,054 for the Wastewater Enterprise's Capital Improvement Program and Sewer System Improvement Program for Fiscal Years 2010-2011 and 2011-2012, of which $297,756,241 is to be funded by revenue bond proceeds or other forms of indebtedness, and placing $329,962,235 on Controller's reserve pending the issuance of such revenue bonds or other forms of indebtedness and/or the receipt of other fees and revenues; and

WHEREAS, On July 26, 2011, the Board adopted Ordinance No. 147-11, the Annual Appropriation Ordinance, increasing the amount of the $348,064,054 appropriation to be funded by revenue bond proceeds or other forms of indebtedness from $297,756,241 to $327,756,241; and

WHEREAS, The Commission reasonably expects to reimburse certain capital expenditures incurred prior to the execution and delivery of the commercial paper with proceeds derived from the financing and hereby declares its official intent to reimburse certain expenditures for capital equipment from future financing proceeds for purposes of complying with certain provisions of the Internal Revenue Code of 1986, as amended; and,

WHEREAS, Section 1.150.2 of the Treasury Regulations requires that the SFPUC declare its reasonable official intent to reimburse prior expenditures with proceeds of the commercial paper; now, therefore, be it

RESOLVED, That the Commission hereby authorizes the issuance and sale of existing commercial paper notes (the Commercial Paper Notes") to temporarily finance a portion of the design, acquisition and construction of the additional Improvements, as well as paying costs of issuance and other incidental costs, provided, however, that (i) the maximum principal amount of Commercial Paper Notes at any one time outstanding, when combined with the total principal amount of outstanding and unpaid obligations issued to the provider(s) of any credit or liquidity facility (the "Liquidity Provider") executed in connection with such Commercial Paper Notes, shall increase to a not to exceed principal amount of $300,000,000 from a not to exceed principal amount of $150,000,000, exclusive of interest reserve, if applicable, (ii) the principal amount of Commercial Paper Notes outstanding at any one time shall not exceed the principal component available to be drawn under any credit facilities or liquidity facilities (the "Liquidity Facility") executed in connection therewith (as authorized below); and (iii) the Commercial Paper Notes shall not mature later than five (5) years from their respective date of issuance (provided that obligations issued to the Liquidity Provider may have a longer maturity) and have a maximum rate or rates of interest of not to exceed twelve percent (12%) per annum. The Commercial Paper Notes (and any repayment obligations owing to the Liquidity Provider) may, in the discretion of the General Manager upon recommendation by the Commission, be subordinate to the payment of the Wastewater Revenue Bonds (including any wastewater revenue bonds current outstanding). The authorization of the Commercial Paper Notes pursuant to this Resolution is in

addition to the authorization of any commercial paper notes authorized by Resolution 06-0164 of this Commission or any other prior resolution or ordinance; and be it

FURTHER RESOLVED, Pursuant to Treasury Regulation Section 1.150-2, the SFPUC hereby declares its intent to reimburse itself, from financing proceeds, for capital expenditures paid within sixty (60) days prior to the effective date of this resolution and other expenditures permitted to be reimbursed pursuant to Treasury Regulation Section 1.150-2. Any reimbursement allocation of financing proceeds to be made with respect to expenditures incurred prior to the execution and delivery of the commercial paper (excluding certain de minimis expenditures and preliminary expenditures in an amount not to exceed twenty percent (20%) of the issue price of the commercial paper) will occur not later than eighteen (18) months after the later of (i) the date on which the expenditure is paid, or (ii) the date on which the facilities are placed in service, but in no event more than three (3) years after the expenditure is paid. Further, any reimbursable cost will be of a type properly chargeable to a capital account under general federal income tax principles; and be it

FURTHER RESOLVED, That revised Proposition E Certificates describing additional improvements to the facilities of the Wastewater Enterprise have been completed and are herein incorporated by reference; and be it

FURTHER RESOLVED, That the Board of Supervisors is hereby urged to authorize by resolution or ordinance, as the case may be, an increase of commercial paper program for the Wastewater Enterprise in an amount up to $300,000,000 for the purpose of providing low cost and flexible financing for the capital programs of the Wastewater Enterprise; provided that the sole source of repayment of such commercial paper notes or bank notes, as the case may be, shall be from the Wastewater Enterprise revenues; and be it

FURTHER RESOLVED, That, subject to Board of Supervisors approval, the General Manager or his appointed designee is hereby authorized and directed to take any and all necessary action expeditious to the issuance of the Commercial Paper Notes and the expansion of a commercial paper program for the Wastewater Enterprise, including but not limited to, the Commercial Paper Notes, and all prior actions heretofore taken towards that end are hereby ratified, approved and confirmed by this Commission; provided, however, that the General Manager or his appointed designee is hereby authorized and directed to return to this Commission for approval of any bank credit facilities negotiated with any bank in connection with the terms of this Resolution..

*I hereby certify that the foregoing resolution was adopted by the Public Utilities Commission at its meeting of* December 13, 2011

Vincent Harris

*Secretary, Public Utilities Commission*